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SUPPLEMENTARY BIBLIOGRAPHY OF KINETIC DATA ON GAS PHASE REACTIONS OF
NITROGEN, OXYGEN, AND NITROGEN OXIDES
(1972 - 1973)

FRANCIS WESTLEY

A reaction-oriented list of references is provided for papers and reports published in 1972 and 1973, containing rate data for reactions of N, N₂, N₂O, N₂O₂, N₂O₃, N₂O₄,

N₂O₅, NO, NO₂, NO₃, NO₄, O, O₂ and O₃ with each other. Some reactions of species in excited states are included. This bibliography, covering about 500 papers, extends the coverage of two previous bibliographies on the same subject, COM-71-00941, NBS-OSRDB-71-2, August 1971 and NBS Special Publication 371, February 1973. Some work published prior to 1972 omitted in the previous publications has been included here.

Key words: Bibliography; chemical kinetics; excited state; gas phase; nitrogen atom; nitrogen molecule; nitrogen oxides; oxygen atom; oxygen molecule; ozone.

INTRODUCTION

In August 1971 the Office of Standard Reference Data issued a publication with the title: "A Bibliography of Kinetic Data on Gas Phase Reactions of Nitrogen, Oxygen and Nitrogen Oxides", (COM-71-0081, NBS-OSRDB-71-2), covering papers dealing with purely chemical reactions published between 1900 and January 1971. In February 1973 this work was supplemented by:

A Supplementary Bibliography of Kinetic Data on Gas Phase Reactions of Nitrogen, Oxygen and Nitrogen Oxides, (NBS Special Publication 371), listing papers dealing with purely chemical reactions published between January 1971 and January 1972, as well as earlier papers which were omitted in the 1971 bibliography. In addition, the supplementary publication listed papers dealing with N and O species in excited states which were not included in the earlier bibliography; the largest class of reactions in this category was the production of molecular oxygen in an excited singlet state ($a^1\Delta_g$, $b^1\Sigma_g$, and $c^1\Sigma_u$).

The present bibliography is an extension of NBS Special Publication 371. It includes papers, not previously listed, that describe studies of the kinetics of chemical reactions as well as of processes involving N and O species in excited states published through January 1974. Most of these papers were published during the years 1972-1973. A small number of earlier papers, omitted in the previous bibliographies, are also included here.

Like the previous publications, this bibliography does not include ion-molecule reactions of N and O species. For this type of process the reader should consult Ferguson, E. E., "Rate Constants of Thermal Energy Binary Ion-Molecule Reactions of Aeronomic Interest, Atomic Data and Nuclear Data Tables 12, 159 (1973).

This bibliography is not the result of the effort of a single person, but of the whole staff of Chemical Kinetics Information Center. My thanks to all of them.

In particular, I wish to thank Dr. David Garvin, Director of the Center, for his more than helpful suggestions and constant guidance; Mr. James G. Koch, Supervisor, for tracking down and obtaining papers and reports otherwise very difficult to obtain; Mrs. Geraldine W. Zumwalt and Miss Darlene Connelly, for typing a difficult manuscript with particular care.

GUIDELINES FOR THE USER

Arrangement of the report. This bibliography is in three parts:

Part I. Reactions of Nitrogen and Oxygen Species.

Part II. Reactions of Oxygen Species.

Part III. The combined bibliography for Parts I and II, arranged alphabetically by authors. The complete reference citation for each article mentioned is given here. Occasionally explanatory notes are appended; these establish the "bibliography chain" for closely related papers by the same authors.

Parts I and II are arranged by reaction, following the order indicated below. At the end of each of these parts are appended short lists of critical reviews or surveys dealing with reactions previously listed.

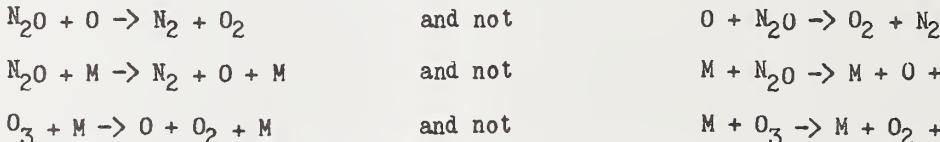
Ordering of chemical reactions. The bibliography lists references to published papers and reports in which rate data are reported for reactions of N, N₂, N₂O, N₂O₂, N₂O₃,

N₂O₄, N₂O₅, NO, NO₂, NO₃, NO₄, O, O₂ and O₃ with each other. As written above, the sequence of these atoms or molecules defines the order in which the reactions are arranged, i. e.: semialphabetically, by first reactant.

Forward and reverse reactions are listed separately. Reactants are always on the left.

Within each reaction the reactants and products are arranged according to the same scheme: separately and alphabetically. The general "third body", is always last.

So, equations are written:



This ordering scheme runs counter to chemical conventions that order by oxidation state. It does bring the atom and its parent molecule together for this simple collection. The rule for arrangement is also simple. It is a character by character comparison of two formulae or equations from left to right, with the priority order being blank, numerals, and then letters; e.g.: N₂O₅ precedes NO.

Chemical symbols without asterisk or dagger (ground state) take precedence over those with asterisk or dagger (excited state). e.g.:



NO + M* → NO* + M (electronic energy transfer) precedes NO* + M → NO + M (electronic relaxation)

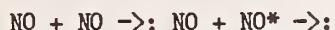
The chemical equations of the overall reactions are not always balanced. An unbalanced equation indicates that the author mentions the reactants and the products of the reaction without the help of an equation, or that the chemical equation given by the author is unbalanced.

Very often, a reference mentioning a reaction without a third body, M, will be found under a heading indicating the same reaction with M on both sides.

In order to render the chemical change occurring in a reaction easily observable to the eye, a reactant, or a product may appear two, or even three times in the same heading, e.g.:



How to find a reaction. It is felt that the most profitable method for finding references dealing with a certain reaction included in this bibliography, would be to consider first all headings with the same reactants, with or without third body M, with or without hv , in excited or in ground state, and regardless of the products. Only thereafter, should the user accept or reject a paper, according to his own objective. As an example: Decomposition of NO. The user should consider the reactions having on the left side:

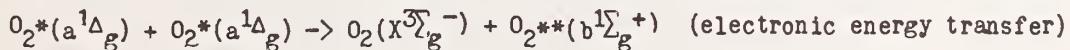
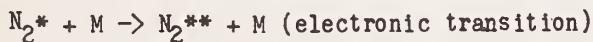


Display of Chemical Reactions and Formulae. (a). General. Most of the reactions listed in parts I and II show a chemical change. Some of these show a photolytic, chemiluminescent or energy transfer process that occurs simultaneously with the chemical change. In addition, there is an important number of reactions that are simply collisional energy transfer or photo-excitation processes.

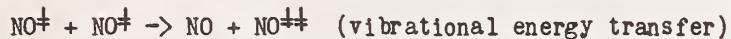
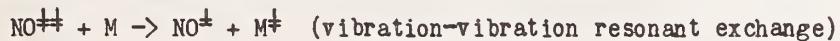
An excited species is indicated by an asterisk or dagger placed between the symbol of the species and the bracket including its configuration. The asterisk denotes an electronically, rotationally, or translationally excited species. In general, the electronic configurations of oxygen species are always indicated, while those of nitrogen species appear only occasionally. The rotational or translational configurations are always omitted.

The dagger indicates a vibrationally excited species only. The vibrational configurations are only occasionally indicated.

An electronic energy transfer from a lower to a higher excited state - or vice versa - is outlined by a double asterisk following the higher excited state. e.g.:



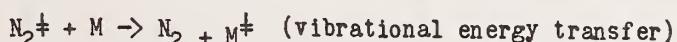
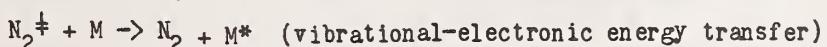
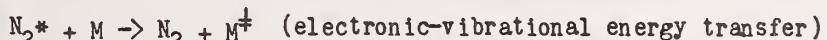
Similarly an energy transfer between two different vibrational levels is outlined as follows:



(b). Excited state of reactants and products. In part I, symbols defining electronic or vibronic states are omitted (*vide supra*) and an excited atom or molecule is indicated by a simple asterisk or dagger. A certain number of energy transfer processes involving the species N_2 , N_2O , or NO_2 which in the first two bibliographies of this series included under the same heading all the pertinent papers - regardless of the type of energy considered - are now split up into several headings, according to the types of energy involved. For instance, the reaction:



which in the August 1971 and February 1973 bibliographies appeared as such, is split up in the present supplement, as follows:

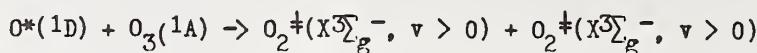


In part II, the arrangement of electronic symbols is different. Taking into account the large number of papers dealing with molecular oxygen in excited states, as well as the

importance of excited oxygen species in the fields of air pollution and atmospheric chemistry, it was felt that a more detailed arrangement of the material included for reactions involving only oxygen species would be useful. For that reason, the electronic configuration of excited states is indicated in the chemical reaction itself, in a bracket following the excited atom or molecule. e.g.:



As a general rule, if a reaction is purely chemical, the electronic configurations are omitted. However, if a reaction includes even a single electronically excited oxygen species, then the electronic configurations of all the O species (including the ground states) are indicated. The ground states are not followed by asterisks. e.g.:



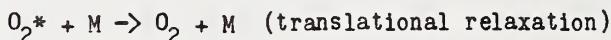
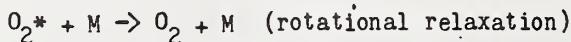
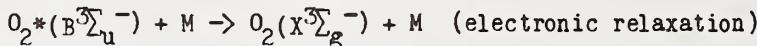
In the special case when a molecule (or third body) acts as an acceptor for the excited oxygen species, it is indicated by the letter A (Acceptor). e.g.:



The order of priority of electronic states is based on the lowest minima of the potential energy curves, followed by the next lowest ones [see: Gilmore, F. R., "Potential Energy Curves for N₂, NO, O₂ and Corresponding Ions," J. Quant. Spectr. Rad. Trans. 5, 369 (1965)]. e.g.:

Priority of O atoms: O(3P), O^{*}(1D), O^{*}(1S); Priority of O₂ molecules: O₂(X³ $\Sigma_g^-); O₂(a¹ Δ_g); O₂[*](b¹ Σ_g^+); O₂[*](c¹ Σ_u^-); O₂[*](A³ Σ_g^+); O₂[*](B³ Σ_u^-).$

If several reactions differ only by the type of energy involved, being similar in every other respect, the priority is based on the nature of the energy, in the order: electronic, rotational, translational, vibration. This rule applies to certain quenching, or energy transfer processes. The nature of the process is indicated in a bracket following the reaction. e.g.:



(c). Excitation of energy transfer agents ("third bodies"). An excited second, or third body is indicated by a second heading centered in the middle of the page. This arrangement results in grouping the reactions according to the second and third bodies. e.g.:



$$M^* = I^*(5^2P_{1/2})$$

Derwent and Thrush

DFSOAW-1972-53-162

$$M^* = N^*(2D)$$

McCullough and McGrath

JPCMAE-1973-1-241

M* = NO₂*

Frankiewicz and Berry

ESTHAG-1972-6-365

M* = O₂*(a¹Δ_g)

Gauthier and Snelling

CHPLBC-1973-20-178

M* = SO₂*(^3B₁)

Davidson, et al.

JPCMAE-1973-1-307

Reference Citation.

The references under each reaction list the author(s) and the sources, in the following form:

Author(s)	Source-Year-Volume-Page	Number of Author(s)
Thompson, S. L.	JCPA6-1968-49-3400	1
Taylor and Setser	JCPA6-1973-58-4840	2
Thompson, et al.	CEPMAO-1972-19-69	3 or more

Variations from this format (which we will call "short reference") are usually in the direction of more explicit specification. These variations are never made in the first two fields, source and year. They are fixed and always present.

The sources are indicated by their ASTM CODEN abbreviations*); a list to those CODENS used in this report follows. In this list, the CODENS include an additional sixth character, which is a "check character"**). A coden prefixed with an asterisk is one not in the ASTM CODEN set. These we have assigned for reports from industrial laboratories, research institutes and universities. When the CODEN system adopts appropriate CODENS they will be replaced. The present, temporary CODENS usually have U or Z for the sixth character.

*) Blumenthal, J. G., Karaman, M., Editors, "CODEN FOR PERIODICAL TITLES" (Including Non-Periodical Titles and Deleted CODEN), Vol. I and II, ASTM Data Series DS 23B, Third Edition, (1970); Padusis, M., Editor, First Supplement to Third Edition, DS 23B-S1 (05-023021-42, 1972), and Second Supplement to Third Edition, DS 23B-S2 (05-023022-42, 1974). (American Society for Testing and Materials, 1916 Race St., Philadelphia, Pa. 19103)

**) The final sixth character in the journal codes is a "check character". This is not shown in the listings in ASTM DS 23B and DS 23B-S1, but the calculation is explained in the introductions to them. See also "Subroutine for the Calculation of CODEN Check Characters," D. Garvin, National Bureau of Standards, Techn. Note 738 (Sept. 1972)

JOURNAL AND REPORT CODENS

AAQAAE	Anales de la Asociacion Quimica Argentina (Buenos Aires)
ACSRAL	American Chemical Society, Abstract of meetings, papers
ACUSAY	Acustica (Stuttgart/Zurich)
ADCSAJ	Advances in Chemistry Series (Washington)
AGEPA7	Annales de Geophysique (Paris)
AIAJAH	A.I.A.A. Journal (American Institute of Aeronautics and Astronautics)
AICEAC	AIChE Journal (American Institute of Chemical Engineers)
AJCHAS	Australian Journal of Chemistry
APEGBA	Applied Physics and Engineering (New York)
APOPAI	Applied Optics (Washington)
APPLAB	Applied Physics Letters (New York)
ARBSAA	Academie Royale Des Sciences, des Lettres et des Beaux-Arts de Belgique, Classe des Sciences, Bulletin (Brussels)
ASACAW	Astronautica Acta (Vienna)
ASJOAB	Astrophysical Journal
ASRAA9	Applied Scientific Research, A: Mechanics, Heat, Chemical Engineering, Mathematical Methods
ASSLAD	Astrophysics and Space Science Library
BAPSA6	Bulletin of the American Physical Society
BBPCAX	Berichte der Bunsengesellschaft fuer Physikalische Chemie (Germany)
BCSJAS	Bulletin of the Chemical Society of Japan
BOOKA7	Book
BSCFAS	Bulletin de la Societe Chimique de France (Paris)
BUKKAT	Bunko Kenkyu (Tokyo)
CBFMAO	Combustion and Flame
CBSTB9	Combustion Science and Technology
CCHKAZ	Comprehensive Chemical Kinetics (Amsterdam)
CEPSAB	Chemical Engineering Progress, Symposium Series

CHDBAN	Comptes Rendus Hebdomadaires des Seances de l'Academie des Sciences, Serie B. Sciences Physiques (Paris)
CHDCAQ	Comptes Rendus Hebdomadaires des Seances de l'Academie des Sciences, Serie C. Sciences Chimiques (Paris)
CHPLBC	Chemical Physics Letters (Amsterdam)
CJCHAG	Canadian Journal of Chemistry
CJPHAD	Canadian Journal of Physics
CSSPAD	Chemical Society, Special Publication (London)
DABBBA	Dissertation Abstracts International, B. The Sciences and Engineering
DKPCAG	Doklady, Physical Chemistry, Proceedings of the Academy of Science of the USSR (New York)
EOSTAJ	EOS, Transactions of the American Geophysical Union
ESTHAG	Environmental Science and Technology (Washington)
FDCSB7	Faraday Discussions of the Chemical Society
HITEA4	High Temperature (New York)
HIECAP	High Energy Chemistry (New York)
IEJQA7	IEEE Journal of Quantum Electronics (New York)
IETNAE	IEEE Transaction on Nuclear Science (Institute of Electrical and Electronics Engineers) (New York)
IECFA7	Industrial and Engineering Chemistry Fundamentals (Washington)
IJCKBO	International Journal of Chemical Kinetics
IJPYAS	Indian Journal of Physics and Proceedings of the Indian Association for the Cultivation of Science (Calcutta)
IVUFAC	Izvestiya Vysshikh Ucheboykh Zavedenii, Fizika
JACSAT	Journal of the American Chemical Society
JAPIAU	Journal of Applied Physics (New York)
JASMAN	Journal of the Acoustical Society of America
JATPA3	Journal of Atmospheric and Terrestrial Physics
JCF TAR	Journal of Chemical Society, Faraday Transactions I (London)
JCF TBS	Journal of Chemical Society, Faraday Transactions II (London)
JCPBAN	Journal de Chimie Physique et de Physicochimie Biologique

JCPA6	Journal of Chemical Physics
JCTLA5	Journal of Catalysis
JFLSAL	Journal of Fluid Mechanics
JGREA2	Journal of Geophysical Research
JMOSA3	Journal of Molecular Spectroscopy
JNBAAR	Journal of Research NBS, Sect. A, Physics and Chemistry
JOPQAG	Journal de Physique (Paris)
JOSAAH	Journal of the Optical Society of America
JPAMA4	Journal of Physics B. Atomic and Molecular Physics (London)
JPCAAC	Journal Air Pollution Control Association
JPCHAX	Journal of Physical Chemistry
JPCMAE	Journal of Photochemistry
JPCRBU	Journal of Physical and Chemical Reference Data
JQSRAE	Journal of Quantitative Spectroscopy and Radiative Transfer
JTPLA2	JETP Letters, Soviet Physics (New York)
JUPSAU	Journal of the Physical Society of Japan (Tokyo)
KICAA8	Kinetics and Catalysis
KRSFAU	Kratkie Soobshcheniya po Fizike (Moscow)
MFEOAR	Memoirs of the Faculty of Engineering, Osaka City University (Osaka)
MOPHAM	Molecular Physics (London)
NATUAS	Nature (London)
NATWAY	Naturwissenschaften (Berlin)
NPSCA6	Nature, Physical Sciences (London)
NSENAO	Nuclear Science and Engineering
NTMKAS	Nauchnye Trudy, Institut Mekhaniki, Moskovskovskii Gosudarstvennyi Universitet
OPSUA3	Optics and Spectroscopy (Washington)
PCSLAW	Proceedings of the Chemical Society, London
PFLDAS	Physics of Fluid
PHRVAO	Physical Review
PHZFAG	Fysikalische Zeitschrift (Leipzig)

PHZSAL	Physikalische Zeitschrift der Sowjetunion
PICABU	Proceedings of the International Congress on Acoustics
PLRAAN	Physical Review, A
PLSSAE	Planetary and Space Science
PPSBAP	Proceedings of the Physical Society, London, Section B
PPSOAU	Proceedings of the Physical Society, London
PRLAAZ	Proceedings of Royal Society, Series A. Mathematical and Physical Sciences (London)
PRLTAO	Physical Review Letters
PRVAAH	Physical Review, Series A
RJPCAR	Russian Journal of Physical Chemistry
RPHAAH	Revue de Physique Appliquee
RSINAK	Review of Scientific Instruments
SPHDA9	Soviet Physics - Doklady (New York)
SPHJAR	Soviet Physics JETP (New York)
SPTPA3	Soviet Physics - Technical Physics (New York)
SUPBAA	Scripta Facultatis Scientiarum Naturalium Universitatis Purkynianae Brunensis (Brno, Czech.)
SYMCAQ	Symposium on Combustion
TCHAAO	Theoretica Chimica Acta (Berlin)
TDKKB7	Tottori Daigaku Kyoikuga Kubunkenkyu Hokoku, Shizenkagaku (Tottori, Japan)
TEXCAK	Theoretical and Experimental Chemistry (New York)
TFSOA4	Transactions of the Faraday Society
UFNAAG	Uspekhi Fizicheskikh Nauk
USFOA7	Uspekhi Fotoniki (Leningrad)
XADRCH	United States Department of Commerce, National Technical Information Service
XCCIAV	United States Department of Commerce, Clearinghouse for Scientific and Technical Information
ZAPHAX	Zeitschrift fuer Angewandte Physik
ZENAAU	Zeitschrift fuer Naturforschung, Ausgabe A. Astrophysik, Physik und Physikalische Chemie (Tuebingen, Germany)
ZEPYAA	Zeitschrift fuer Physik (Berlin)
ZPCFAX	Zeitschrift fuer Physikalische Chemie (NF)

- 23CHAG Shock Tube, Proceedings of the International Shock
Tube Symposium, 7th, University of Toronto, Canada
- 25QHAW Physics of Electronic and Atomic Collisions, Invited
Papers and progress Reports from the International
Conference of the Physics of Electronic and Atomic
Collisions, 7th Amsterdam, Netherlands
- 26BMAD MTP(Medical and Technical Publishing Company)
International Review of Science: Physical Chemistry,
Series One 1972-1973
- 26JOAP Gorenje I Vzryv, Materialy Vsesciuznogo Simpoziuma Po
Goreniju I Vzrivu, 3rd
- 26NPAE Proceedings of the Symposium on Emissions from Continuous
Combustion Systems (General Motors Research Lab.)
- 26WVA9 Chemiluminescence and Bioluminescence
- 27ZEAE Shock Tube, Proceedings of the International Shock
Tube Symposium, 8th
- *AVEVZ AVCO - Everett Research Report
- *MISCZ Miscellaneous

I. Reactions Involving N (and O) Species



Hutchison, R. B.
Lawrence and Savage
Lin, et al.

DABBBA-1971-31-3824
PHRVAO-1966-141-67
JCPSA6-1970-53-3896



Stone and Zippf

JCPSA6-1973-58-4278



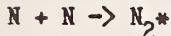
Golde and Thrush

FDCSB7-1972-53-233



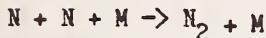
Black, G.
Golde and Thrush
Husain, et al.
Lin and Kaufman

XADRCH-1973-AD 762201
FDCSB7-1972-53-233
FDCSB7-1972-53-201
JCPSA6-1971-55-3760



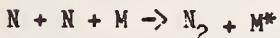
Becker, et al.
Golde and Thrush
Golde and Thrush
Groth, et al.
Thrush and Golde

ZENAAU-1971-26-929
FDCSB7-1972-53-52
PRLAZ-1972-330-79
BBPCAX-1972-76-1101
26WVA9-1973-2-73 (review)



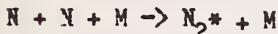
Brennen and Shane
Campbell and Gray
Hanson and Watson
Shallhorn, P. M.
Shui, V. H.
Slovetskii and Todesaita
Slovetskii and Todesaita
Wagner, H. Gg.

XADRCH-1971-AD 721216
CHPLBC-1973-18-607
AIAJAH-1966-4-749 (review)
DABBBA-1971-32-1755
JCPSA6-1972-57-1704 (calculation)
HIECAP-1973-7-259
HIECAP-1973-7-264
27ZEAE-1971-8-4 (review)



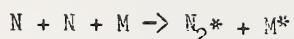
Felder and Young

JCPSA6-1972-56-6028



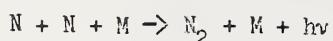
Becker, et al.
Becker, et al.
Becker, et al.
Becker, et al.
Brennen and Brown
Brennen and Shane
Duthler and Broida
Ghosh and Gupta
Groth, et al.
Groth, et al.
Kley, D.
Shui, V. H.
Thrush and Wild

BBPCAX-1969-73-011
25QHAW-1971-7-41
FDCSB7-1972-53-35
25QHAW-1971-7-59
JCPSA6-1970-52-4910
XADRCH-1971-AD 721216
26WVA9-1973-2-101
IJPYAS-1972-46-18
NATWAY-1972-59-379
BBPCAX-1972-76-1101
FDCSB7-1972-53-69
JCPSA6-1972-57-1704 (calculation)
JCFTBS-1972-68-2023



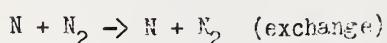
Ghosh and Gupta

IJPYAS-1972-46-16



Becker, et al.
Gross, R. W. F.

ZENAAU-1971-26-929
JCPSA6-1968-48-1302



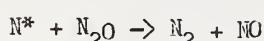
Lyon, R. K.

CJCHAG-1972-50-1437 (upper limit estimate)



Husain, et al.

FDCSB7-1972-53-201



Husain, et al.
Lin and Kaufman

FDCSB7-1972-53-201
JCPSA6-1971-55-3760



Black and Eckstrom
Hamlin and Myers
Husain, et al.
Hushfar, et al.
Hushfar, et al.
Lin, et al.
Quan, et al.

XADRCH-1973-AD 757050
JQSRAE-1973-13-293 (review)
FDCSB7-1972-53-201
APOPAL-1971-10-1843
APOPAL-1972-11-1656
JCPSA6-1970-53-3896
SYMCAQ-1973-14-851



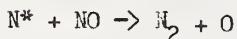
Felder and Young

JCPSA6-1972-57-572



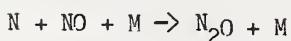
Bin-Nun and Rokni
Black and Eckstrom
Black, et al.
Felder and Young

IEJQA7-1974-QE-10-89
XADRCH-1973-AD 757050
JCPSA6-1973-58-4792
JCPSA6-1972-57-572



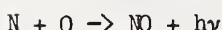
Husain, et al.

FDCSB7-1972-53-201



Schofield, K.

JPCRBU-1973-2-25 (evaluation)



Mandelman, et al.

JCPSA6-1973-58-84



Campbell and Gray

CHPLEC-1973-18-607



Felder and Young
Ghosh, et al.

JCPSA6-1972-56-6028
IJPYAS-1970-44-162 (mechanism)



Campbell, et al.
Campbell and Thrush

CHPLBC-1971-8-612
JQSRAE-1968-8-1571



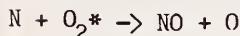
Baulch, et al.
Bowman and Seery
Campbell and Baulch
Hamlin and Myers
Husain, et al.
Hushfar, et al.
Hushfar, et al.
Livesey, et al.
Quan, et al.
Schmidt and Schiff
Shahed, S. M.
Stupochenko, et al.
Thompson, et al.

SYMCAQ-1973-14-107 (evaluation)
26NPAE-1971-123
26BMAD-1972-9-45 (review)
JQSRAE-1973-13-293 (review)
FDCSB7-1972-53-201
APOPAT-1971-10-1843
APOPAT-1972-11-1656
CBSTB9-1971-4-9 (evaluation)
SYMCAQ-1973-14-851 (calculation)
CHPLBC-1973-23-339
DABBBA-1971-31-7320
APEGBA-1967-1 (review)
SYMCAQ-1973-14-787



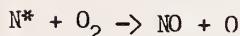
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Hushfar, et al.

APOPAT-1971-10-1843
APOPAT-1972-11-1656



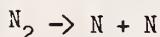
Schmidt and Schiff
Wayne, R. P.
Wayne, R. P.

CHPLBC-1973-23-339
ASSLAD-1971-25-240 (review)
FDCSB7-1972-53-234 (review)



Husain, et al.
Lin and Kaufman

FDCSB7-1972-53-201
JCPSA6-1971-55-3760



Troe, J.

NATWAY-1969-56-553 (calculation)



Becker, et al.
Becker, et al.
Becker, et al.
Brennen and Shane
de Chaffnut, F.
Freund, R. S.
Golde and Thrush
Granzow, et al.
Groth, et al.
Jeunehomme, M. L.
LeBreton, et al.
Lyutui and Melnikov
Millet, et al.
Polak, et al.
Thrush and Golde
Zipf, E. C., Jr.

BBPCAX-1969-73-911
ZENAAU-1971-26-929
FDCSB7-1972-53-35
XADRCH-1971-AD 721216
IETNAE-1972-19-112
JCPSA6-1972-56-4344
PRLAAZ-1972-330-121
JPCHAX-1968-72-3741
NATWAY-1972-59-379
XCCIAV-1967-AD 812578
JCPSA6-1971-55-2940
OPSUA3-1973-34-385
JCPSA6-1973-58-5839
HIECAP-1972-6-164 (calculation)
26WVA9-1973-2-73 (review)
JCPSA6-1963-38-2034



Axtmann and Sears
Axtmann and Sears

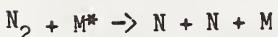
JCPSA6-1966-44-3279
NSENAO-1965-23-299

$N_2^{**} \rightarrow N_2^* + h\nu$ (continued)

Becker, et al.	FDCSB7-1972-53-35
Becker, et al.	25QHAW-1971-7-39
Bourène and Le Calvé	JCPA6-1973-58-1452
Brennen and Shane	XADRCH-1971-AD 721216
Brocklehurst, B.	TFSOA4-1964-60-2151
Brown and Miller	TFSOA4-1957-53-748
Calo, et al.	RSINAK-1970-41-1639
Carlson and Rieper	JCPA6-1972-57-760
Dondes, et al.	XADRCH-1972-COO-3461-1
Duthler and Broida	26WVA9-1973-2-101
Ghosh, et al.	IJPYAS-1970-44-162 (mechanism)
Golde and Thrush	FDCSB7-1972-53-52
Golde and Thrush	PRLAAZ-1972-330-121
Hartfuss and Schmillen	ZENAAU-1968-23-722
Jeunehomme, M. L.	XCCIAV-1967-AD 812578
Kurzweg, et al.	JCPA6-1973-59-2641
LeCalvé and Bourène	JCPA6-1973-58-1446



Hanson, R. K.	DABBA-1969-29-2400
Hanson and Baganoff	AIAJAH-1972-10-211
Hánson and Watson	AIAJAH-1966-4-749 (review)
Shui, V. H.	JCPA6-1972-57-1704 (calculation)
Soloukhin, R. I.	23CHAG-1970-7-663 (review)
Stupochenko, et al.	APGBA-1967-1 (review)
Treanor and Marrone	PFLDAS-1962-5-1022 (calculation)
Troe, J.	NATWAY-1969-56-553 (calculation)
Wagner, H. G.	27ZEE-1971-8-4 (review)
Yalovik, M. S.	26JOAP-1971-3-698



Tsivenko and Myasnikov

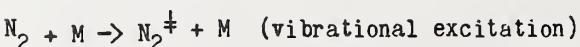
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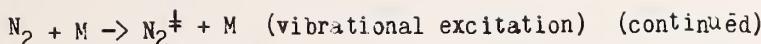
Golde and Thrush	FDCSB7-1972-53-52
Hornung, H. G.	JCPA6-1972-56-3172 (mechanism)
Mamikonyan, et al.	HIECAP-1972-6-425 (calculation)
Polak, et al.	HIECAP-1972-6-164 (calculation)
Polak, et al.	HIECAP-1972-6-350 (review)
Shui, V. H.	JCPA6-1972-57-1704 (calculation)
Vincenti and Kruger	BOOKA7-1965 (review)
Yalovik and Losev	NTMKAS-1972-4



Axtmann and Sears	JCPA6-1966-44-3279
Axtmann and Sears	NSENAO-1965-23-299
Carlson and Rieper	JCPA6-1972-57-760
Cartwright, D. C.	PRVAAH-1970-2-1331
Chutjian, et al.	PRLTAO-1973-30-195
Dreyer and Perner	CHPLBC-1972-16-169
Hornung, H. G.	JCPA6-1972-56-3172
LeBreton, et al.	JCPA6-1971-55-2940
Mamikonyan, et al.	HIECAP-1972-6-425 (calculation)
Pugnin, et al.	IVUFAC-1972-15-49



Abraham and Fisher	JAPIAU-1972-43-4621 (calculation)
Filippov and Vendillo	RJPCAR-1962-36-1069
Polak and Slovenskii	HITEA4-1972-10-575

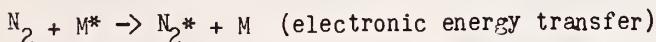


Popovich, et al.

Simonaitis and Heicklen

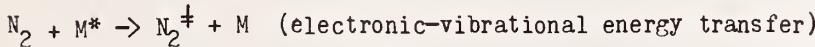
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JPCMAE-1973-1-181



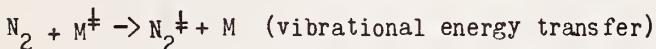
Bochkova and Chernysheva
 Brown and Miller
 Cosby and Moran
 Granzow, et al.
 LeCalvé and Bourène
 Simonaitis and Heicklen
 Sokabe and Murai
 Taylor and Setser
 Wauchop and Broida
 Yamashita, I.

OPSUA3-1971-31-359
 TFSOA4-1957-53-748
 JCPSA6-1972-57-4111
 JPCHAX-1968-72-3741
 JCPSA6-1973-58-1446
 JPCMAE-1973-1-181
 MFEOAR-1972-13-163
 JCPSA6-1973-58-4840
 JCPSA6-1972-56-330
 BUKKAT-1972-21-180



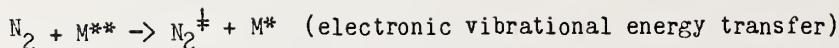
Bauer, et al.
 Bellisio, et al.
 Burrow and Davidovits
 Czajkowski, et al.
 Felder and Young
 Fisher and Smith
 MacDonald, J. R.
 Scheer and Fine

JCPSA6-1969-51-4173 (calculation)
 JCPSA6-1968-48-2376
 PRITAO-1968-21-1789
 CJPHAD-1973-51-1582
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 APOPAL-1971-10-1803 (calculation)
 JCPSA6-1972-57-1016 (review)
 JCPSA6-1962-36-1264

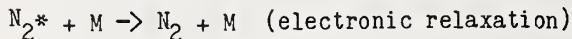


Abraham and Fisher
 Basov, et al.
 Bauer and Roesler
 Bauer and Schotter
 Berend, et al.
 Biryukov, et al.
 Bjorre, A.
 Bjerre and Nikitin
 Borghi and Charpenel
 Cheo, P. K.
 Fisher and Kummeler
 Fisher and Kummeler
 Gower and Carswell
 Green and Hancock
 Gueguen, et al.
 McKnight, W. B.
 Moore, C. B.
 Rao, et al.
 Rapp, D.
 Rapp and Englander-Golden
 Rapp and Englander-Golden
 Roach and Smith
 Rosser, et al.
 Sadowski, et al.
 Sato, et al.
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 Taylor and Bitterman
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 Taylor, et al.
 Teare, et al.
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 Williams, A. P.

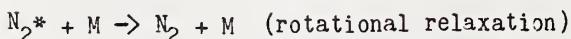
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 CSSPAD-1966-20-245
 JCPSA6-1969-51-3261
 JCPSA6-1972-57-3601 (calculation)
 26JOAP-1971-3-694
 TEXCAK-1968-4-372 (calculation)
 CHPLBC-1967-1-179 (calculation)
 ASACAW-1972-17-833 (calculation)
 IEJQA7-1968-QF-4-334 (review)
 JCPSA6-1968-49-1075 (calculation)
 JCPSA6-1968-49-1085 (calculation)
 APPLAB-1972-21-556
 JCPSA6-1973-59-4326
 CHDBAN-1971-272-1139
 JAPIAU-1969-40-2810
 BOOKA7-1967-133 (review)
 CHPLBC-1972-17-531
 JCPSA6-1965-43-316 (calculation)
 JCPSA6-1964-40-573 (calculation)
 JCPSA6-1964-40-3120 (calculation)
 JCPSA6-1969-50-4114
 IEJQA7-1968-QF-4-336
 JPCMAE-1972-1-23
 JCPSA6-1969-50-1911
 ZAPHAX-1965-19-55
 JCPSA6-1973-59-89 (calculation)
 *AVEVZ-1968-294
 23CHAG-1970-7-577
 *AVEVZ-1966-250
 NATUAS-1970-225-240 (calculation)
 JCPSA6-1968-49-5472
 ASSLAD-1971-25-177



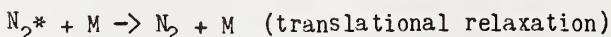
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Penzes, et al.	IJCKBO-1972-4-449



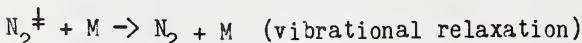
Black, G.	XADRCH-1973-AD 762201
Becker, et al.	BBPCAX-1969-73-911
Becker, et al.	ZENAAU-1971-26-929
Brennen and Shane	XADRCH-1971-AD 721216
de Chaffnut, F.	IETNAE-1972-19-112
Dreyer and Perner	CHPLBC-1972-16-169
Dreyer and Perner	JCP SA6-1973-58-1195
Gann, et al.	CHPLBC-1972-16-330
Golde and Thrush	PRLAAZ-1972-330-79
Golde and Thrush	PRLAAZ-1972-330-97
Golde and Thrush	PRLAAZ-1972-330-121
Groth, et al.	BBPCAX-1972-76-1101
Janca, J.	SUPBAA-1972-2-75
Kley, D.	FDCSB7-1972-53-69
Meyer, et al.	JPCHAX-1972-76-1
Millet, et al.	JCP SA6-1973-58-5839
Polak, et al.	HIECAP-1972-6-164 (calculation)
Ravodina and Popova	IVUFA C-1973-16-127
Simonaits and Heicklen	JPCM AE-1973-1-181
Slanger, et al.	JPCM AE-1973-2-63
Taylor and Setser	JACSAT-1971-93-4930
Thrush and Golde	26WVA9-1973-2-73 (review)
Thrush and Wild	JCF TS-1972-08-2023
Tilford and Wilkinson	ASJUAB-1965-141-427



Andersen and Hornig	MOPHAM-1959-2-49
Gelb and Kapral	CHPLBC-1972-17-397 (calculation)
Kneser, H. O.	BOOKA7-1965-2A-133 (review)



Kohler, M.	ZEPYAA-1949-125-715 (calculation)
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Bauer and Cummings	JCP SA6-1962-36-618 (calculation)
Bauer and Roesler	CSSPAD-1966-20-245
Black and Eckstrom	XADRCH-1973-AD 757050
Blythe, P. A.	JFLSAI-1961-10-33 (calculation)
Calvert and Amme	JCP SA6-1966-45-4710 (calculation)
Cheo, P. K.	IEJQA7-1968-QE-4-334 (review)
Cottreau, et al.	27ZEA E-1971-8-30
Cottrell and Read	JCP SA6-1962-37-2733
Delos, J. B.	JCP SA6-1973-59-2365 (review)
Dixon and Greenwood	PRLAAZ-1924-105-199
Dreyer and Perner	JCP SA6-1973-58-1195
Eckstrom, D. J.	JCP SA6-1973-59-2787
Evans, L. B.	JASMAN-1972-51-409
Filippov and Vendillo	RJPCAR-1962-36-1069
Fisher and Bauer	JCP SA6-1972-57-1966 (calculation)
Fisher and Kummler	JCP SA6-1968-49-1075 (calculation)
Fisher and Smith	CHPLBC-1970-6-438 (calculation)
Golde and Thrush	FDCSB7-1972-53-52
Hanson, R. K.	DABRBA-1969-29-2400
Henderson, M. C.	PICABU-1962-4-J25
Henderson and Donnelly	JASMAN-1962-34-779
Henderson, et al.	JASMAN-1969-45-109

$N_2^{\ddagger} + M \rightarrow N_2 + M$ (vibrational relaxation) (continued)

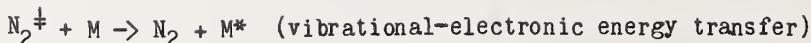
Hodge, A. H.	JCPA6-1937-5-974
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Hurle, I. R.	27ZEAE-1971-8-3 (review)
Hurle and Russo	JCPA6-1965-43-4434
Hurle, et al.	JCPA6-1964-40-2076
Kamimoto and Matsui	AIAJAH-1969-7-2358
Kewley, D. J.	JCPA6-1973-59-549
Kley, D.	FDCSB7-1972-53-69
Kneser, H. O.	BOOKA7-1965-2A-133 (review)
Kovacs and Mack	APPLAB-1972-20-487
Lawley, L. E.	PPSBAP-1952-65-181
Legay, F.	JOPQAG-1964-25-99
Levitt and Sheen	CSSPAD-1966-20-269
MacDonald, J. R.	DABBBA-1971-32-1135
McLaren and Appleton	27ZEAE-1971-8-27
McNeal, et al.	CHPLBC-1972-16-507
Meolans and Zeitoun	CHDBAN-1972-275-493
Millikan, R. C.	CSSPAD-1966-20-219 (review)
Moore, C. B.	BOOKA7-1967-133 (review)
Parker and Ritke	JASMAN-1972-51-169
Parker and Ritke	JASMAN-1972-52-1380
Parker and Ritke	JCPA6-1972-56-4834
Perner, D.	FDCSB7-1972-53-64
Piercy, J. E.	JASMAN-1969-46-602 (review)
Popovich, et al.	RJPCAR-1971-45-123
Provenccher and McKenney	CJCCHAG-1972-50-2529
Schaefer, W.	ZAPHAX-1965-19-55
Sentman and Solomon	JCPA6-1973-59-89 (calculation)
Shields and Lagemann	JASMAN-1957-29-470
Shin, H. K.	JCPA6-1972-57-1363 (review)
Soloukhin, R. I.	23CHAG-1970-7-663 (review)
Taylor and Bitterman	*AVEVZ-1967-282 (review)
Taylor, et al.	*AVEVZ-1966-250
Treanor and Marrone	PFLDAS-1962-5-1022 (calculation)
Treanor, et al.	JCPA6-1968-48-1793 (calculation)
Tsuchiya and Kuratani	CFMMAO-1964-8-299
Van Itterbeek, et al.	ASRAA9-1957-6-421
Vincenti and Kruger	BOOKA7-1965 (review)
White, D. R.	JCPA6-1968-49-5472
Yalovik and Losev	NTMKAS-1972-4

 $N_2^* + M \rightarrow N_2 + M^*$ (electronic energy transfer)

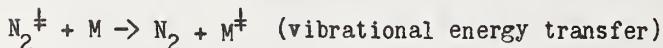
Black, G.	XADRH-1973-AD 762201
Brekke, A.	PLSSAE-1973-21-698 (mechanism)
Duthler and Broida	26WVA9-1973-2-101
Golde and Thrush	FDCSB7-1972-53-233
Golde and Thrush	PRLAAZ-1972-330-97
Golde and Thrush	PRLAAZ-1972-330-109
Golde and Thrush	26WVA9-1973-2-485
Granzow, et al.	JPCHAX-1968-72-3741
Henriksen, K.	PLSSAE-1973-21-963
Johnson and Fontijn	CHPLBC-1973-23-252
Meyer, et al.	JPCHAX-1972-76-1
Meyer, et al.	JMOSA3-1972-44-206 (mechanism)
Simonaaitis and Heicklen	JPCMAE-1973-1-181
Stedman, et al.	JACSAT-1968-90-6856
Thrush and Wild	JCFTBS-1972-68-2023

 $N_2^* + M \rightarrow N_2 + M^{\ddagger}$ (electronic-vibrational energy transfer)

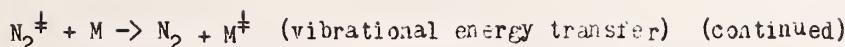
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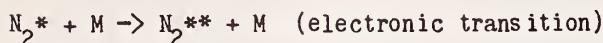
MacDonald, J. R.	JCPA6-1972-57-1016 (review)
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Provencher and McKenney	CJCHAG-1972-50-2529
Starr, W. L.	JCPA6-1965-43-73
Tsuchiya and Suzuki	BCSJAB-1971-44-901



Basov, et al.	SPTPA3-1970-15-126 (calculation)
Bauer and Roesler	CSSPAD-1966-20-245
Bauer and Schotter	JCPA6-1969-51-3261
Berend, et al.	JCPA6-1972-57-3601 (calculation)
Biryukov, et al.	SPHJAR-1969-28-762 (calculation)
Black and Eckstrom	XADRCH-1973-AD 757050
Brau, et al.	JCPA6-1970-52-4306
Bulthuis, K.	JCPA6-1973-58-5786
Camac, M.	XADRCH-1973-AD 762316 (calculation)
Cook and McNeal	JCPA6-1972-56-1388
Demin, et al.	JTPLA2-1973-18-149
Fisher and Kummler	JCPA6-1968-49-1075 (calculation)
Fisher and Kummler	JCPA6-1968-49-1085 (calculation)
Gordiets, et al.	SPHJAR-1968-26-1039 (calculation)
Gower and Carswell	APPLAB-1972-21-556
Grin', et al.	JTPLA2-1973-18-155
Hooker and Millikan	JCPA6-1963-38-214
Horn and Oettinger	JCPA6-1971-54-3040
Huetz-Aubert and Tripodi	JCPA6-1972-55-5724 (calculation)
Kamimoto and Matsui	AIAJAH-1969-7-2358
Konyukhov, et al.	JTPLA2-1969-10-53
Legay, et al.	CHDBAN-1968-266-855
Legay, et al.	IEJQAT-1970-QE-6-181
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Legay-Sommaire and Legay	CJPHAD-1970-48-1966
MacDonald, J. R.	DABBBA-1971-32-1135
McKnight, W. B.	JAPIAU-1969-40-2810
McLaren and Appleton	27ZEAE-1971-8-27
McNeal, et al.	JCPA6-1972-57-4752
Meolans and Zeitoun	CHDBAN-1972-275-493
Oettinger and Horn	XCCIAV-1970-AD 710607
Patel, C. K. N.	APPLAB-1965-6-12 (mechanism)
Patel, C. K. N.	APPLAB-1965-7-15 (mechanism)
Patel, C. K. N.	BAPSA6-1965-10-72 (mechanism)
Patel, C. K. N.	JCPBAN-1967-64-82 (review)
Patel, C. K. N.	PRLTAO-1964-13-617 (mechanism)
Piercy, J. E.	JASMAN-1969-46-602 (review)
Rapp, D.	JCPA6-1965-43-316 (calculation)
Rapp and Englander-Golden	JCPA6-1964-40-573 (calculation)
Rapp and Englander-Golden	JCPA6-1964-40-3120 (calculation)
Roach and Smith	JCPA6-1969-50-4114
Rosser, et al.	IEJQAT-1968-QE-4-336
Rushbrook, P. R.	DABBBA-1970-31-1892
Sadowski, et al.	JPCMAE-1972-1-23
Sato, et al.	JCPA6-1969-50-1911
Schaefer, W.	ZAPHAX-1965-19-55
Taylor and Bitterman	*AVEVZ-1967-282 (review)
Taylor and Bitterman	23CHAG-1970-7-577
Taylor, et al.	*AVEVZ-1966-250
Teare, et al.	NATUAS-1970-225-240 (calculation)
Treanor, et al.	JCPA6-1968-48-1798 (calculation)
Tsuchiya and Kuratani	CBFMAO-1964-8-299
Vasil'ev, et al.	HIECAP-1972-6-194 (review)
Weber and Deutsch	IEJQAT-1966-QE-2-369



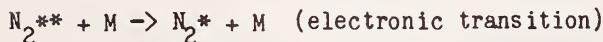
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Zittel and Moore	APPLAB-1972-21-81



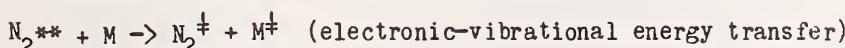
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Pugnini, et al.	IVUFAC-1972-15-49



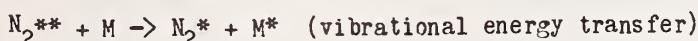
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Janca, Y.	SUBPAA-1972-2-75



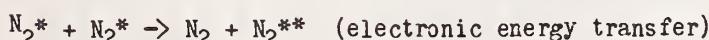
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Axtmann and Sears	NSENAO-1965-23-299
Becker, et al.	FDCSB7-1972-53-35
Brocklehurst, B.	TFSOA4-1964-60-2151
Brown and Miller	TFSOA4-1957-53-748
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Dreyer and Perner	CHPLBC-1972-16-169
Ghosh, et al.	IJPYAS-1970-44-162
Grun and Schopper	ZENAAU-1954-9-134
Hartfuss and Schmillen	ZENAAU-1968-23-722
Hirsh, et al.	XADRCH-1966-AD 800398
Hollstein, et al.	CJCHAG-1969-47-1858
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Kimball, L. J.	XADRCH-1971-AD 741130
Kley, D.	FDCSB7-1972-53-69
Peyron, et al.	IEJQA7-1970-QE-6-179
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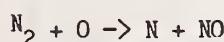
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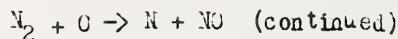
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Kennealy, et al.	JCPBAN-1967-64-43
Krause, et al.	JCPA6-1972-46-4593
Patel. C. K. N.	JCPBAN-1967-64-82 (review)



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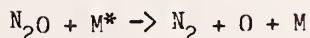
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Livesey, et al.	CBSTB9-1971-4-9 (evaluation)
Quan, et al.	SYMCAQ-1973-14-851 (calculation)
Shahed, S. M.	DABBBA-1971-31-7320
Stupochenko, et al.	APEGBA-1967-1 (review)



Thompson, et al. Vincenti and Kruger	SYMCAQ-1973-14-787 BOOKA7-1965 (review)
$N_2 + O^* \rightarrow N_2O^*$ Gaedtke, et al.	BBPCAX-1972-76-1101 (mechanism)
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$N_2 + O^* + M \rightarrow N_2O + M$ Simonaitsis, et al.	JGREA2-1972-77-4248
$N_2 + O_2 \rightarrow NO + NO$ Stupochenko, et al. Thompson, et al. Thompson, et al. Vincenti and Kruger	APEGBA-1967-1 (review) CBFMAO-1972-19-69 SYMCAQ-1973-14-787 BOOKA7-1965 (review)
$N_2O \rightarrow N_2 + O$ Delos, J. B. Fisher and Bauer Gebelein and Jortner Stearn and Eyring Troe, J. Verem'ev, et al.	JCPSA6-1973-59-2365 (review) JCPSA6-1972-57-1966 (calculation) TCHAAO-1972-25-145 (calculation) JCPSA6-1935-3-778 (calculation) BBPCAX-1968-72-906 (review) KICAA8-1972-13-243
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$N_2O + h\nu \rightarrow N_2 + O^*$ Greenberg and Heicklen Preston and Barr Ridley, et al. Simonaitsis, et al.	IJCKBO-1972-4-417 JCPSA6-1971-54-3347 JCPSA6-1973-58-3878 IJCKBO-1972-4-497
$N_2O + M \rightarrow 1/2N_2 + NO + M$ (overall) Bes, et al. Bonnefois and Destriau Destriau, M. Halladay and Mrazek	JCPBAN-1973-70-433 BSCFAS-1970-2113 BSCFAS-1971-2848 JCTLA5-1973-28-221



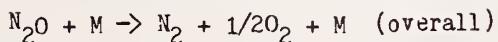
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Borisov, et al.	KICAA8-1973-14-247
D'Amato, R. J.	DABBBA-1971-32-853
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Gilbert and Ross	JCPAS6-1972-57-2299 (calculation)
Lipke, W. H.	DABBBA-1971-32-2739
Lipke, et al.	CBSTB9-1973-6-257
Navailles and Destriau	BSCFAS-1968-2295 (mechanism)
Schofield, K.	JPCRB0-1973-2-25 (evaluation)
Soloukhin, R. I.	ASACAW-1972-17-633
Soloukhin, R. I.	DKPCAG-1972-207-999
Soloukhin, R. I.	SYMCAQ-1973-14-77
Thompson, et al.	SYMCAQ-1973-14-787
Zaslonko, et al.	26J0AP-1971-3-085



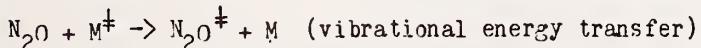
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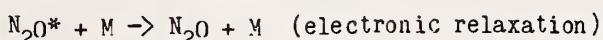
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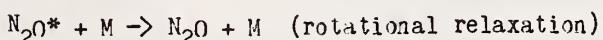
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Destriau, M.	BSCFAS-1971-2848
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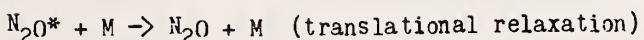
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Patel, C. K. N.	APPLAB-1965-6-12 (mechanism)
Patel, C. K. N.	BAPSAG-1965-10-72 (mechanism)
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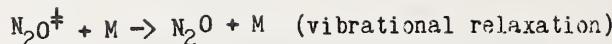
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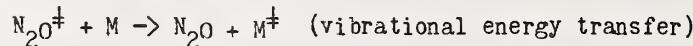
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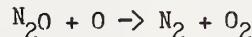
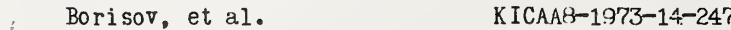
Kohler, M.	ZEPYAA-1949-125-715 (calculation)
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Gueguen, et al.	CHDBAN-1970-270-1668 (calculation)
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Warner, G. W.	JASMAN-1938-9-30



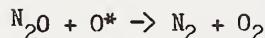
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Roach and Smith	JCPGAG-1969-50-4114



Blair and Getzinger	27ZEAE-1971-8-42
Borisov and Skachkov	KICAA8-1972-13-34
D'Amato, R. J.	DABBBA-1971-32-853 (mechanism)
Dorthe and Destriau	BSCFAS-1971-2406
Lin and Bauer	JCPGAG-1969-50-3377
Lipke, W. H.	DABBBA-1971-32-2739
Lipke, et al.	CBS TB9-1973-6-257
Milks and Matula	SYMCAQ-1973-14-83
Soloukhin, R. I.	DKPCAG-1972-207-999 (mechanism)
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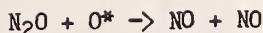
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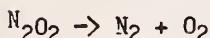
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Loucks and Cvetanović	JCPGAG-1972-57-1682
Paraskevopoulos, et al.	CJCHAC-1972-50-1838
Simonaitis, et al.	IJCKBO-1972-4-497
Simonaitis and Heicklen	IJCKBO-1973-5-231



Blair and Getzinger	27ZEAE-1971-8-42
Borisov and Skachkov	KICAA8-1972-13-34
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Lipke, et al.	CBS TB9-1973-6-257
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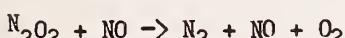
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Nicolet and Peetermans	AGEPA7-1972-28-751 (review)
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Simonaitis, et al.	IJCKBO-1972-4-497
Simonaitis and Heicklen	IJCKBO-1973-5-231



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Krezenksi, et al.	JPCMAE-1972-1-11
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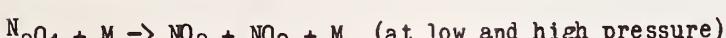
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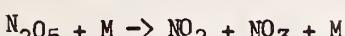
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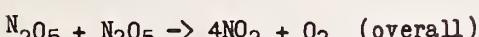
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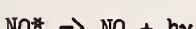
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Schofield, K.	JPCRBU-1973-2-25 (evaluation)
Sessler, G.	PICABU-1961-3-522 (review)



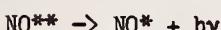
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Dutton, et al.	JPCHAX-1972-76-2614



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Jeunehomme, M. L.	XCCIAV-1967-AD 812578
Mandelman, et al.	JCPSA6-1973-58-84
Weinstock, et al.	JCPSA6-1972-56-3456



Groth, et al.	JQSRAE-1971-11-1475
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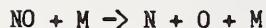
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Stone and Zipf

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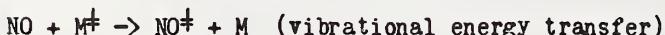
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Slanger and Black
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Wauchop and Broida
Young and Van Volkenburgh

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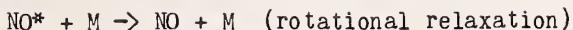
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JCPSA6-1971-54-3040
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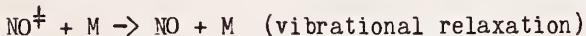


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Campbell and Neal
Campbell and Thrush
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Melton and Klemperer
Simonaitis and Heicklen
Stezhenskii, A. I.

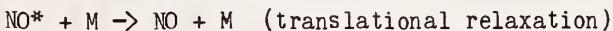
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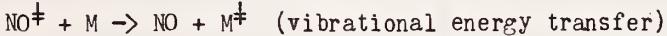
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Moore, C. B.	BOOKA7-1967-133 (review)
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Stephenson, J. C.	JCPSA6-1973-59-1523
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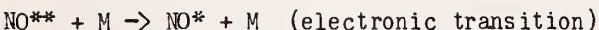
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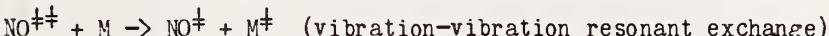
Melton, L. A. DABBA-1972-32-6332
Melton and Klemperer JCPSA6-1973-59-1099



Berend, et al.	JCPSA6-1972-57-3601 (calculation)
Karl, et al.	JCPSA6-1967-46-244
Moore, C. B.	BOOKA7-1967-133 (review)
Rapp, D.	JCPSA6-1965-43-316 (calculation)
Sato, et al.	JCPSA6-1969-50-1911
Stephenson, J. C.	JCPSA6-1973-59-1523
Taylor, et al.	*AVEVZ-1966-250



Campbell and Neal FDCSB7-1972-53-72
Krezenksi, et al. JPCMMAE-1972-1-11



Basco and Norrish PRLAAZ-1962-268-291 (mechanism)
Lin, M. C. 26WVA9-1973-2-487



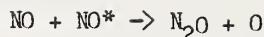
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Sturochenko, et al. APEGBA-1967-1 (review)



Krezenksi, et al. JPCMMAE-1972-1-11
Mandelman, et al. JCPSA6-1973-58-84



Lin and Bauer JCPSA6-1969-50-3377
Myerson, A. L. SYMCAQ-1973-14-219



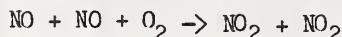
Krezenski, et al.

JPCMMAE-1972-1-11



Stephenson, J. C.

JCPA6-1973-59-1523



England, C.

DABBBA-1971-31-6585

Johnston, H.

*MISCH-1970-4-TF7/S3 (review)

Laurendeau, N. M.

*MISCHZ-1972

Stedman, et al.

JPCAAC-1972-22-260

Stedman and Niki

ESTHAG-1973-7-735

Stedman and Niki

JPCHAX-1973-77-2604



Harker and Johnston

JPCHAX-1973-77-1153

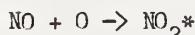


Quan, et al.

SYMCAQ-1973-14-851

Vincenti and Kruger

BOOKA7-1965 (review)



Becker, et al.

ASSLAD-1971-25-261

Becker, et al.

CHPLBC-1970-6-583

Becker and Thran

BBPCAX-1972-76-1111

Cody, R. J.

DABBBA-1972-33-1068

Ghosh, et al.

AGEPA7-1970-26-53

Groth, et al.

NATWAY-1972-59-379

Navailles and Destriau

BSCFAS-1968-2295



Becker and Thran

BBPCAX-1972-76-1111

Becker, et al.

BBPCAX-1971-75-1137

Becker, et al.

CHPLBC-1972-15-215

Becker, et al.

SYMCAQ-1973-14-353

Cody, R. J.

DABBBA-1972-33-1068

Fontijn and Lee

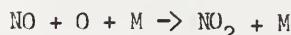
JOSAAH-1972-62-1095

Golde, et al.

JCPA6-1973-59-3953

Kaufman, F.

26WVA9-1973-2-83 (review)



D'Amato, R. J.

DABBBA-1971-32-853 (mechanism)

Gaedtke, et al.

SYMCAQ-1973-14-295

Harker and Johnston

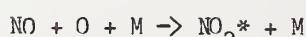
JPCHAX-1973-77-1153

Lin and Bauer

JCPA6-1969-50-3377

Wagner, H. G.

27ZEEA-1971-8-4 (review)



Becker, et al.

ASSLAD-1971-25-261

Becker, et al.

BBPCAX-1971-75-1137

Becker, et al.

CHPLBC-1970-6-583

Becker, et al.

CHPLBC-1972-15-215

Becker and Thran

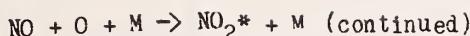
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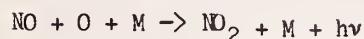
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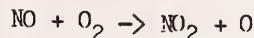
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Slanger, et al.
Williams, D. J.

IJCKBO-1973-5-615
AJCHAS-1973-26-1837



Becker, et al.	ASSLAD-1971-25-261
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Becker, et al.	CHPLBC-1972-15-215
Becker, et al.	SYMCAQ-1973-14-353
Becker and Thran	BBPCAX-1972-76-1111
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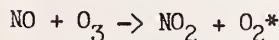


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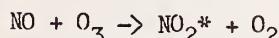


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Ghormley, et al.	JPCHAX-1973-77-1341
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Stedman and Niki	ESTHAG-1973-7-735
Stedman and Niki	JPCHAX-1973-77-2604



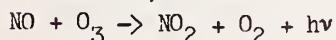
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CHPLBC-1973-20-178



Ackerman, M.
Kurylo, et al.

ARBSAA-1967-53-1311
JPCMAE-1974 (in press)



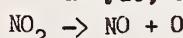
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JPCAAC-1972-22-260



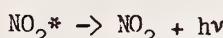
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Gordon and Lin
Kurylo, et al.

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JPCMAE-1974 (in press)

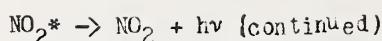


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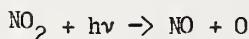
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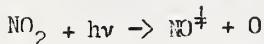
Ackerman, M.	ARBSAA-1967-53-1311
Becker, et al.	BBPCAX-1971-75-1137
Becker, et al.	CHPLBC-1972-15-215
Becker and Thran	BBPCAX-1972-76-1111
Braslavsky and Heicklen	JPCMAE-1973-1-203
Cody, R. J.	DABBA-1972-33-1063
Gangi and Burnelle	JCPA6-1971-55-843 (calculation)
Gangi and Burnelle	JCPA6-1971-55-851 (calculation)
Ghosh, et al.	AGEPA7-1970-26-53
Heil, O.	ZEPYAA-1932-77-563
Kaufman, F.	26WVA9-1973-2-83 (review)
Kempter, et al.	CHPLBC-1972-16-310
LeBreton, et al.	JCPA6-1971-55-2940
LeBreton, et al.	25QHAW-1971-7-291
Lee and Uselman	FDCSB7-1972-53-125



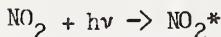
Navailles and Destriau	BSCFAS-1968-2295
Sackett and Yardley	JCPA6-1972-57-152
Sakurai and Broida	JCPA6-1969-50-2404
Solarz, et al.	JCPA6-1973-58-5172



Gaedtke, et al.	SYMCAQ-1973-14-295
Gaedtke, et al.	CHPLBC-1972-16-177
Gaedtke and Troe	BBPCAX-1973-77-24 (calculation)
Gerstmayr, et al.	JPCHAX-1972-76-474
Harker and Johnston	JPCHAX-1973-77-1153
Holmes, et al.	ESTHAG-1973-7-519
Stedman and Niki	ESTHAG-1973-7-735



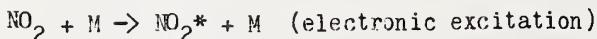
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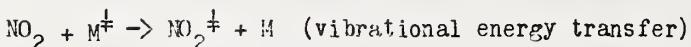
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Frankiewicz and Berry	JCPA6-1973-58-1787
Gerstmayr, et al.	JPCHAX-1972-76-474
Solarz, et al.	JCPA6-1973-58-5172



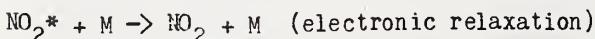
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Wagner, H. G.	27ZEAE-1971-8-4 (review)



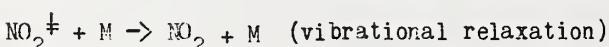
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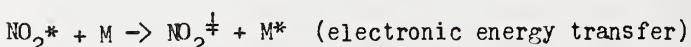
Stephenson, et al.	JCPA6-1968-48-4790
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Becker and Thiran	BBPCAX-1972-76-1111
Braslavsky and Heicklen	JPCMAE-1973-1-203
Cody, R. J.	DABBBA-1972-33-1068
Frankiewicz and Berry	ESTHAG-1972-6-365
Frankiewicz and Berry	JCPA6-1973-58-1787
Kaufman, F.	26WVA9-1973-83 (review) ✓
LeBreton, et al.	25QHAW-1971-7-291
Sakurai and Broida	JCPA6-1969-50-2404
Solarz, et al.	JCPA6-1973-58-5172
Williams, D. J.	AJCHAS-1973-26-1837



Cody, R. J.	DABBBA-1972-33-1068
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Frankiewicz and Berry	ESTHAG-1972-6-365
Frankiewicz and Berry	JCPA6-1973-58-1787
Gauthier and Snelling	CHPLBC-1973-20-178
Ghosh, et al.	AGEPA7-1970-26-53
Jones and Bayes	CHPLBC-1971-11-163
Jones and Bayes	JCPA6-1973-59-3119

$\text{NO}_2^{\pm} + \text{M} \rightarrow \text{NO}_2 + \text{M}^{\pm}$ (vibrational energy transfer)	
Basco and Morse	PRLAAZ-1973-334-553 (mechanism)
$\text{NO}_2 + \text{NO}_2 \rightarrow \text{NO} + \text{NO} + \text{O}_2$	
Laurendeau, N. M.	*MISCH-1972
$\text{NO}_2 + \text{NO}_2 + \text{M} \rightarrow \text{N}_2\text{O}_4 + \text{M}$	
Schofield, K. Sessler, G.	JPCRBU-1973-2-25 (evaluation) PICABU-1961-3-522 (review)
$\text{NO}_2 + \text{NO}_3 \rightarrow \text{NO} + \text{NO}_2 + \text{O}_2$	
Bérces and Forgeteg	TFSOA4-1970-66-640
$\text{NO}_2 + \text{NO}_3 + \text{M} \rightarrow \text{N}_2\text{O}_5 + \text{M}$	
Johnston, H. Wu, et al.	*MISCH-1970-4-TF7/S3 (review) JPCHAX-1973-77-2507
$\text{NO}_2 + \text{O} \rightarrow \text{NO} + \text{O}_2$	
Bemand, et al. Black, G. Breckenridge and Miller Clyne and Cruse Clyne and Cruse D'Amato, R. J. Davis, et al. Gerstmayr, et al. Harker and Johnston Slanger, et al. Stedman and Niki Stedman and Niki	JCFIBS-1974-70-564 XADRCI-1973-AD 762201 JCPSAG-1972-56-475 JCFIBS-1972-68-1281 TFSOA4-1971-67-2869 DABBA-1971-32-853 (mechanism) JCPSAG-1973-58-530 JPCHAX-1972-76-474 JPCHAX-1973-77-1153 IJCKBO-1973-5-615 ESTHAG-1973-7-735 JPCHAX-1973-77-2604
$\text{NO}_2 + \text{O} \rightarrow \text{NO} + \text{O}_2^*$	
Basco and Morse	PRLAAZ-1973-334-553 (mechanism)
$\text{NO}_2 + \text{O} + \text{M} \rightarrow \text{NO}_3 + \text{M}$	
Gaedtke, et al. Harker and Johnston Stedman and Niki	SYMCAQ-1973-14-295 JPCHAX-1973-77-1153 ESTHAG-1973-7-735
$\text{NO}_2 + \text{O}_3 \rightarrow \text{NO}_3 + \text{O}_2$	
Ghormley, et al. Johnston, H. Stedman and Niki Wu, et al.	JPCHAX-1973-77-1341 *MISCH-1970-4-TF7/S3 (review) ESTHAG-1973-7-735 JPCHAX-1973-77-2507

Part I. Reviews

Bortner, M. H. BOUKA7-1963-172 (atmospheric reactions)
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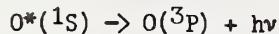
Part I. Reviews (continued)

Brasseur and Nicolet	PLS SAE-1973-21-939 (chemospheric reactions)
Campbell and Baulch	26BMAD-1972-9-46 (atomic N reaction)
Carrington, T.	26WVA9-1973-2-7 (chemiluminescent reactions)
Duthler and Broida	26WVA9-1973-2-101 (N_2 afterglow)
Fisher and Smith	APOPAL-1971-10-1803 (N_2^+ quenching)
Fontijn, et al.	26WVA9-1973-2-393 (chemiluminescent reactions)
Gilbert and Thomas	CCHKAZ-1972-6-139 (nitrogen oxides)
Johnston, H.	*MISCZ-1970-4-TF7/S3 (NO, NO_2 atmospheric reactions)
Kaufman, F.	26WVA9-1973-2-83 (NO_2 airglow)
Kneser, H. O.	BOOKA7-1965-2A-133 (N_2, N_2O, NO relaxation)
Millikan, R. C.	CSSPAD-1966-20-219 (N_2 relaxation)
Moore, C. B.	BOOKA7-1967-133 (N_2 energy transfer)
Nicolet and Peetersmans	AGEPA7-1972-28-751 (N_2O reaction in atmosphere)
Reston and Cvetanovic	CCHKAZ-1972-4-47 (decomposition of nitrogen oxides)
Schofield, K.	JPCRBU-1973-3-25 (N_2O and N_2O_4 formation and decomposition)
Soloukhin, R. I.	23CHAG-1970-7-663 (N_2, NO in shock tube)
Stupochenko, et al.	APEGBA-1967-1 (N_2, NO in shock waves)
Taylor and Bitterman	*AVEVZ-1967-1 (N_2 relaxation)
Thrush and Golde	26WVA9-1973-2-73 (N_2 afterglow)
Troe, J.	BBPCAX-1968-72-908 (NO_2, N_2O)
Vincenti and Kruger	BOOKA7-1965 (N_2, NO)
Wagner, H. G.	27ZEAE-1971-8-4 (N, N_2, NO, NO_2 in shock waves)
Zafonte, L.	*MISCZ-1970-4-TF7/S2 (NO photoxidation in air)

Part II. Reactions Involving Only O Species



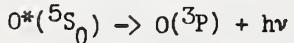
Hernandez, G.	JGREA2-1972-77-3625
Hutchison, R. B.	DABBBA-1971-31-3824
Lawrence, G. M.	PLRAAN-1970-2-397
Sipler and Biondi	JGREA2-1972-77-6202



Corney and Williams	JPAMA4-1972-5-686
Hutchison, R. B.	DABBBA-1971-31-3824
Lawrence, G. M.	PLRAAN-1970-2-397



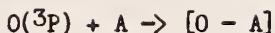
Hutchison, R. B.	DABBBA-1971-31-3824
Lawrence, G. M.	PLRAAN-1970-2-397
Lin, et al.	JCPASG-1970-53-3896
Mumma and Zipf	JCPASG-1971-55-1661
Savage and Lawrence	ASJOAB-1966-146-940



Hutchison, R. B.	DABBBA-1971-31-3824
Johnson, C. E.	PLRAAN-1972-5-2688



Yamagishi, M.	TDKKB7-1971-22-55
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Bonanno, et al.	JCPA6-1972-57-1377
Boocock and Cvetanović	CJCHAG-1961-39-2436
Mani and Sauer	ADCSAJ-1968-82-142



Paraskevopoulos, et al.	CJCHAG-1972-50-1838
Pravilov and Vilesov	USFOA7-1971-41



Brekke, A.	PLSSAE-1973-21-698 (mechanism)
Henriksen, K.	PLSSAE-1973-21-863



Black, G.	XADRCH-1973-AD 762201
Black and Eckstrom	XADRCH-1973-AD 757050
Castellano and Schumacher	AAQAAE-1972-60-375
Clark and Noxon	JCPA6-1972-57-1033
Clerc and Reiffsteck	JCPA6-1968-48-2799
Delos, J. B.	JCPA6-1973-59-2365 (review)
Fisher and Bauer	JCPA6-1972-57-1966 (calculation)
Fortin, et al.	CJCHAG-1972-50-2747
Gaedtke, et al.	SYMCAQ-1973-14-295
Gaedtke, et al.	BBPCAX-1972-76-1101 (mechanism)
Ghormley, et al.	JPCHAX-1973-77-1341
Giachardi and Wayne	PRLAAZ-1972-330-131
Greenberg and Heicklen	IJCCKBO-1972-4-417
Heidner and Husain	IJCCKBO-1973-5-819
Heidner and Husain	NPSCA6-1973-241-10
Heidner, et al.	CHPLBC-1972-16-530
Heidner, et al.	JCFTBS-1973-69-927
Hernandez, G.	JGREA2-1972-77-3625
Koroleva and Khvorostovskaya	OPSUA3-1972-33-344
Lissi and Heicklen	JPCMMAE-1972-1-39
Loucks and Cvetanović	JCPA6-1972-57-1682
Peterson and Vanzandt	PLSSAE-1969-17-1725
Pravilov, A. M.	*MISCZ-1972-165
Pravilov, et al.	HIECAP-1971-5-265
Pravilov and Vilesov	RJPCAR-1971-45-727,
Pravilov and Vilesov	USFOA7-1971-41
Simonaitis and Heicklen	IJCCKBO-1972-4-529
Simonaitis and Heicklen	IJCCKBO-1973-5-231
Simonaitis, et al.	JGREA2-1972-77-4248
Sipler and Biondi	EOSTAJ-1971-52-883
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Snelling, D. R.	CJCHAG-1974-52-257

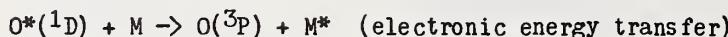


Atkinson and Welge	JCPA6-1972-57-3689
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Black, G.	XADRCH-1973-AD 762201
Corney and Williams	JPAMA4-1972-5-686
Felder and Young	JCPA6-1972-56-6028
Filseth, et al.	JCPA6-1972-52-239
Koroleva and Khvorostovskaya	OPSUA3-1972-33-344
London, et al.	JCPA6-1971-54-4512
Paulson and Shepherd	JATPA3-1965-27-831
Slanger, et al.	CHPLBC-1972-17-401



Röth, et al.

ZENA AU-1973-28-725



$$M^* = O_2^*(a^1\Delta_g)$$

McCullough and McGrath

JPCMAE-1973-1-241

$$M^* = O_2^*(b^1\Sigma_g^+)$$

Giachardi and Wayne

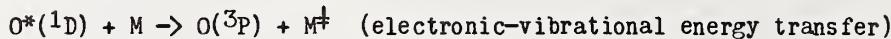
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Wayne, R. P.

FDCSB7-1972-53-172 (review)



Black and Eckstrom

XADRCH-1973-AD 757050

Collins and Husain

JPCMAE-1973-1-481

Felder and Young

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Ghormley, et al.

JPCCHAX-1973-77-1341

McCullough and McGrath

JPCMAE-1973-1-241



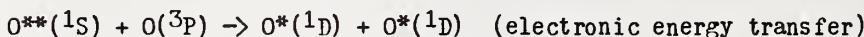
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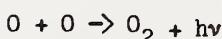
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DABBBA-1973-33-3850



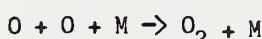
Olson, R. E.

CHPLBC-1973-19-137



Moses and Wu

PHRVAO-1952-87-628 (mechanism)



Campbell and Gray

CHPLBC-1973-18-607

Soloukhin, R. I.

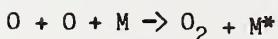
23CHAG-1970-7-663 (review)

Thrush, B. A.

ASSLAD-1971-25-231 (review)

Wagner, H. G.

27ZEAE-1971-8-4 (review)



$$M^* = Na^*$$

Kaskan, et al.

XCCIAV-1965-AD 470984

$$M^* = N_2^{**}(C^3\Pi_u)$$

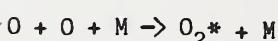
Ghosh, et al.

IJPYAS-1970-44-162 (mechanism)

$$M^* = O^*(^1S)$$

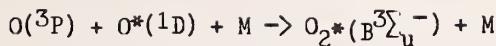
Felder and Young

JCPA6-1972-56-6028



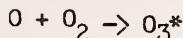
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JCPA6-1972-57-1938 (calculation)



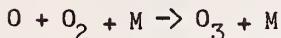
Dorthe and Destriau

SYMCAQ-1973-14-343

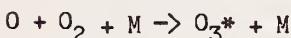


Campbell and Baulch

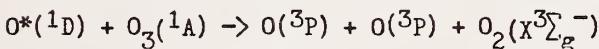
26BMAD-1972-9-45 (review)



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Ball and Larkin	NPSCAG-1973-245-63
Benson, S. W.	ADCSAJ-1959-21-405 (review)
Benson and Axworthy	ADCSAJ-1959-21-398 (review)
Bevan and Johnson	JCFTAR-1973-69-922
Campbell and Baulch	26BMAD-1972-9-45 (review)
Castellano and Schumacher	AAQAAE-1972-60-375
Castellano and Schumacher	CHPLBC-1972-13-625
Castellano and Schumacher	ZPCFAX-1973-83-54
DeMore, W. B.	JPCHAX-1972-76-3527
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Filippov and Emelyanov	RJPCAR-1962-36-89
Filippov and Kobozev	RJPCAR-1961-35-1021
Filippov and Vendillo	RJPCAR-1961-35-303
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Pravilov, et al.	HIECAP-1971-5-349
Pravilov, et al.	HIECAP-1971-5-265
Pravilov and Vilesov	RJPCAR-1971-45-727
Pravilov and Vilesov	USFOA7-1971-41
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Samoilovich, et al.	RJPCAR-1962-36-517
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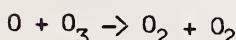
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Giachardi and Wayne	PRLAAZ-1972-330-131
McCullough and McGrath	JPCMAE-1973-1-241
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Webster, H. A., III	DABBBA-1972-33-673
Webster and Bair	JCPGAG-1972-57-3802



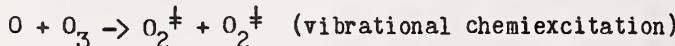
London, et al.	JCPGAG-1971-54-4512
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Axworthy and Benson	ADCSAJ-1959-21-388
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Benson, S. W.	ADCSAJ-1959-21-405 (review)
Benson and Axworthy	ADCSAJ-1959-21-398 (review)



Black and Eckstrom	XADRCI-1973-AD 757050 (review)
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Husain, et al.	JPCMAE-1972-1-69
Johnston, H.	*MISCZ-1970-4-TF7/S3 (review)
Jones, I. T. N.	ASSLAD-1971-25-253
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Samoilovich and Filippov	RJPCAR-1962-36-760
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Wayne, R. P.	FDCSB7-1972-53-172 (review)



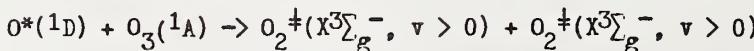
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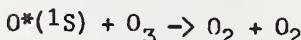
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Giachardi and Wayne	PRLAAZ-1972-330-131
Jones, I. T. N.	ASSLAD-1971-25-253
Lissi and Heicklen	JPCMAE-1972-1-39
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Wayne, R. P.	FDCSB7-1972-53-231 (review)



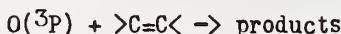
Castellano and Schumacher	AAQAAE-1972-60-375
Davenport, et al.	FDCSB7-1972-53-230
Lissi and Heicklen	JPCMAE-1972-1-39
McCullough and McGrath	JPCMAE-1973-1-241
Wayne, R. P.	ASSLAD-1971-25-240 (review)
Wayne, R. P.	FDCSB7-1972-53-231 (review)
Wayne, R. P.	FDCSB7-1972-53-172 (review)



Webster, H. A., III	DABBBA-1972-33-673
Webster and Bair	JCPA6-1972-57-3802



London, et al.	JCPA6-1971-54-4512
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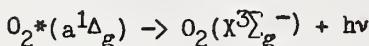
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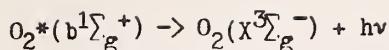
Troe, J.	BBPCAX-1968-72-908 (review)
Troe, J.	NATWAY-1969-56-553 (calculation)



Krasovskii, V. I.	UFNAAG-1954-54-469 (review)
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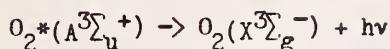
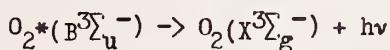
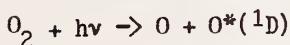
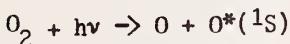


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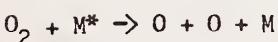
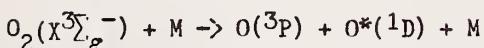
Becker, et al.

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RJPCAR-1971-45-727

Ridley, et al.

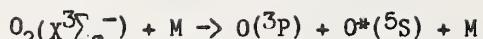
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Filippov and Vendillo
Hanson, R. K.
Kuksenko and Losev
Kuksenko and Losev
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Treanor and Marrone
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Wagner, H. Gg.IECFA7-1973-12-90 (calculation)
ADCSAJ-1959-21-405 (review)
RJPCAR-1962-36-1069
DABBBA-1969-29-2400
TEXCAK-1969-5-305 (calculation)
TEXCAK-1969-5-309 (calculation)
CEPSAB-1971-67-37
RJPCAR-1962-36-760
23CHAG-1970-7-663 (review)
APEGBA-1967-1 (review)
BOOKA7-1963-160 (calculation)
PFLDAS-1962-5-1022 (calculation)
BOOKA7-1965 (review)
27ZEAEE-1971-8-4 (review)Filippov and Vendillo
Popovich, et al.
Simonaitis and Heicklen
Stedman, et al.RJPCAR-1962-36-1069
RJPCAR-1971-45-123
JPCMAE-1973-1-181
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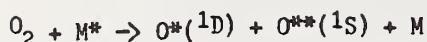
Lawrence, G. M.

PLRAAN-1970-2-397

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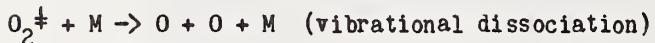
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Mumma and Zipf JCPSA6-1971-55-1661
Yamagishi, M. TDKKB7-1971-22-55



Yamagishi, M. TDKKB7-1971-22-55



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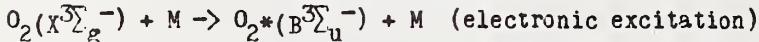
Huffman, et al. JCPSA6-1969-50-4594
Julienne and Krauss JNBAAR-1972-76-661 (calculation)
Konishi, et al. JUPSAU-1970-29-526
Schulz and Dowell PHRVAO-1962-128-174
Trajmar, et al. PRVAAH-1971-4-1482
Wong, et al. PRLTAO-1973-31-969



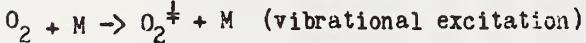
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Mecke and Baumann ZEPYAA-1932-73-139
Schulz and Dowell PHRVAO-1962-128-174
Trajmar, et al. PRVAAH-1971-4-1482
Wong, et al. PRLTAO-1973-31-969



Bell and Kwong AICEAC-1972-18-990
Konishi, et al. JUPSAU-1970-29-526



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Kuksenko, et al. SPHDA9-1966-11-546 (calculation)
Kuksenko and Losev TEXCAK-1969-5-305 (calculation)
Schulz and Dowell PHRVAO-1962-128-174



$$M^* = I^*(5^2P_{1/2})$$

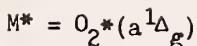
Derwent and Thrush FDCSB7-1972-53-162

$$M^* = N^*(^2D)$$

McCullough and McGrath JPCMAB-1973-1-241

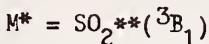
$$M^* = NO_2^*$$

Frankiewicz and Berry ESTHAG-1972-6-365
Frankiewicz and Berry JCPSA6-1973-58-1787
Jones and Bayes CHPLFC-1971-11-163
Jones and Bayes JCPSA6-1973-59-3119



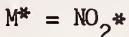
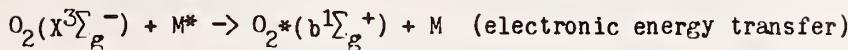
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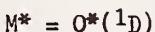
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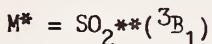
Frankiewicz and Berry

JCPSA6-1973-58-1787



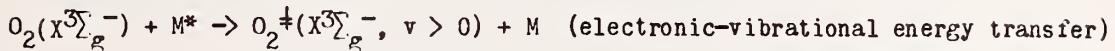
Ghormley, et al.
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Snelling, D. R.
Wayne, R. P.

JPCHAX-1973-77-1341
PRLAAZ-1972-330-131
CJCHAG-1974-52-257
FDCSB7-1972-53-172 (review)



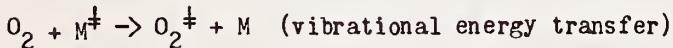
Davidson, et al.

JPCMAE-1973-1-307



Ghormley, et al.
McCullough and McGrath

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JPCMAE-1973-1-241



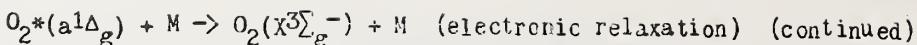
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Fisher and Kummeler
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JCPSA6-1968-49-1075 (calculation)
JCPSA6-1968-49-1085 (calculation)
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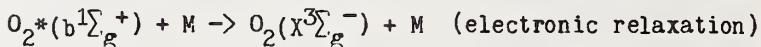
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ACSRAL-1971-162-PETR-23
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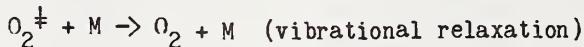
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Kohler, M.

ZEPYAA-1949-125-715

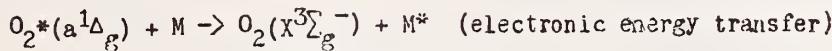


Basco and Morse
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Breen, et al.
Breig, E. L.
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Herzfeld, K. F.
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Kuksenko and Losev
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CSSPAD-1966-20-245
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JCPSA6-1966-45-4710 (calculation)
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JASMAN-1969-46-602 (review)
PICABU-1961-3-532
PHZSAL-1935-8-300
ACUSAY-1966-17-73
PPSOAU-1931-43-242
JCPSA6-1964-40-737

$O_2^{\pm} + M \rightarrow O_2 + M$ (vibrational relaxation) (continued)

Shin, H. K.	JCPA6-1972-57-1363 (review)
Shuler, K. E.	JPCHAX-1957-61-849 (calculation)
Soloukhin, R. I.	23CHAG-1970-7-663 (review)
Stupochenko, et al.	APEGBA-1967-1 (review)
Thompson, S. L.	JCPA6-1968-49-3400 (calculation)
Treanor and Marrone	BOOKA7-1963-160 (calculation)
Treanor and Marrone	PFLDAS-1962-5-1022 (calculation)
Vance, C. B.	PHRVAO-1932-39-737
Van Itterbeek and Zink	ASRAA9-1958-7-375
Vincenti and Kruger	BOOKA7-1965 (review)
Warner, G. W.	JASMAN-1938-9-30
Webster and Bair	JCPA6-1972-56-6104
Webster and Bair	JCPA6-1972-57-3802
Weston and Campbell	PPSBAP-1953-66-769
White, D. R.	JCPA6-1968-49-5472



$$M^* = I^*(5^2P_{1/2})$$

Derwent and Thrush FDCSB7-1972-53-162

$$M^* = O_2^*(a^1\Delta_g)$$

Jones and Bayes JCPA6-1972-57-1003

$$M^* = SO^*(1\Delta)$$

Breckenridge and Miller JCPA6-1972-56-465

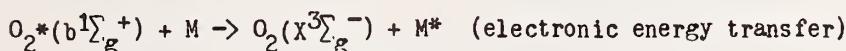


$$M^{\ddagger} = NO^{\ddagger}(X^2\Pi_{\Gamma}, v = 4)$$

Ogrzylo and Thrush CHPLBC-1973-23-34

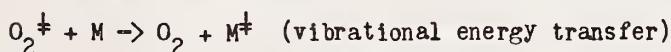
$$M^{\ddagger} = O_2^{\ddagger}(X^3\Sigma_g^-, v = 5)$$

Parker and Ritke JCPA6-1973-59-3713

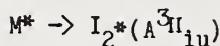


$$M^* = I_2^*(A^3\Pi_{iu})$$

Derwent and Thrush JCFTBS-1972-68-720

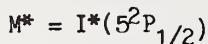


Bass, H. E.	JCPA6-1973-58-4783
Bauer and Roesler	CSSPAD-1966-20-245
Berend, et al.	JCPA6-1972-57-3601 (calculation)
Center, R. E.	JCPA6-1973-58-5230
Collins and Husain	JPCMAE-1973-1-481
Kiefer, J. H.	JCPA6-1972-57-1938
Parker and Ritke	JCPA6-1973-59-3713
Piercy, J. E.	JASMAN-1969-46-602 (review)
Rapp, D.	JCPA6-1965-43-316 (calculation)
Vasil'ev, et al.	HIECAP-1972-6-194 (review)
Webster, H. A., III	DABBBA-1972-53-673
Webster and Bair	JCPA6-1972-57-3802
White, D. R.	JCPA6-1968-49-5472
Williams, A. P.	ASSLAD-1971-25-177



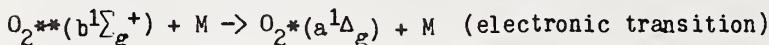
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Thrush, B. A.

JCFTBS-1972-68-720
ASSLAD-1971-25-231 (review)



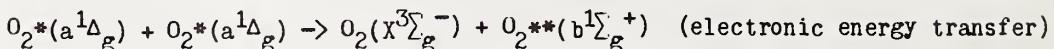
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Thrush, B. A.

FDCSB7-1972-53-162
ASSLAD-1971-25-231



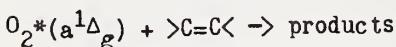
Davidson and Ogryzlo
Davidson and Ogryzlo

CJCHAG-1974-52-240
26WVA9-1973-2-111 (review)



Becker, et al.
Thrush, B. A.

CHPLBC-1971-8-25 (mechanism)
ASSLAD-1971-25-231 (review)



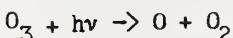
Ackerman, et al.
Ackerman, et al.
Herron and Huie
Herron and Huie
Huie and Herron
Johnston, H.

ACSRAL-1971-162-PETR-24
CHPLBC-1972-12-526,
ACSRAL-1971-162-PETR-23
ESTHAG-1970-4-685
IJCKBO-1973-5-197
*MISCZ-1970-4-TF7/S3 (review)



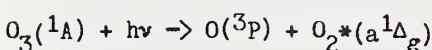
Troe, J.
Troe, J.

BBPCAX-1968-72-908 (review)
NATWAY-1969-56-553 (calculation)



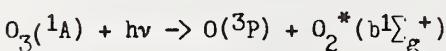
Wayne, R. P.

FDCSB7-1972-53-172 (review)



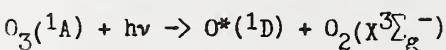
Castellano and Schumacher
Castellano and Schumacher
Castellano and Schumacher
Crutzen, et al.
Simonaitys, et al.
Wayne, R. P.

AAQAAE-1972-60-375
CHPLBC-1972-13-625
ZPCFAX-1973-83-54
JGREA2-1971-76-1490 (review)
CHPLBC-1973-19-601
ASSLAD-1971-25-240 (review)



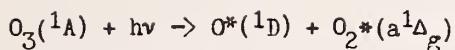
Simonaitys, et al.

CHPLBC-1973-19-601

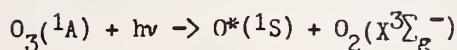


Davenport, et al.
Gaedtke, et al.

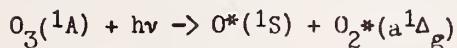
FDCSB7-1972-53-230
BBPCAX-1972-76-1101 (mechanism)



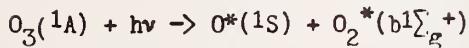
Castellano and Schumacher	AAQAAE-1972-60-375
Crutzen, et al.	JGRE2-1971-76-1490 (review)
Davenport, et al.	FDCSB7-1972-53-230
Fortin, et al.	CJCHAG-1972-50-2747
Ghormley, et al.	JPCHAX-1973-77-1341
Giachardi and Wayne	PRLAAZ-1972-330-131
Huffman, et al.	JCPAA6-1969-50-4594
Jones, I. T. N.	ASSLAD-1971-25-253
Lin and Demore	JPCMAE-1973-2-161
Lissi and Heicklen	JPCMAE-1972-1-39
Simonahtis, et al.	CHPLBC-1973-19-601
Snelling, D. R.	CJCHAG-1974-52-257
Wayne, R. P.	ASSLAD-1971-25-240 (review)
Wayne, R. P.	FDCSB7-1972-53-231 (review)
Wayne, R. P.	FDCSB7-1972-53-172 (review)
Wayne, R. P.	FDCSB7-1972-53-230 (calculation)
Webster and Bair	JCPAA6-1972-56-6104
Webster, H. A., III	DABBBA-1972-33-673



Ridley, et al.	JCPAA6-1973-58-3878
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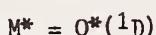
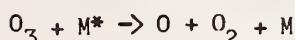
Ridley, et al.	JCPAA6-1973-58-3878
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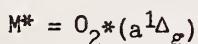
Ridley, et al.	JCPAA6-1973-58-3878
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Axworthy and Benson	ADC SAJ-1959-21-388
Benson, S. W.	ADC SAJ-1959-21-405 (review)
Benson and Axworthy	ADC SAJ-1959-21-398 (review)
Black and Eckstrom	XADRCH-1973-AD 757050 (review)
Filippov and Emel'yanov	RJPCAR-1961-35-196
Filippov and Emel'yanov	RJPCAR-1962-36-89
Filippov and Kobozev	RJPCAR-1961-35-1021
Filippov and Vendillo	RJPCAR-1961-35-303
Popovich, et al.	RJPCAR-1971-45-123
Samoilovich and Filippov	RJPCAR-1962-36-760
Samoilovich, et al.	RJPCAR-1962-36-517
Soloukhin, R. I.	23CHAG-1970-7-663 (review)



Davenport, et al.	FDCSB7-1972-53-230
McCullough and McGrath	JPCMAE-1973-1-240
Wayne, R. P.	FDCSB7-1972-53-230 (review)
Wayne, R. P.	FDCSB7-1972-53-172 (review)
Webster and Bair	JCPAA6-1972-57-3802



Becker, et al.	CHPLBC-1972-14-489
Campbell and Baulch	26BMAD-1972-9-46 (review)
Castellano and Schumacher	AAQAAE-1972-60-375 (mechanism)

$M^* = O_2^*(a^1\Delta_g)$ (continued)

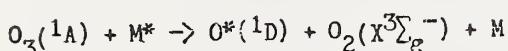
Castellano and Schumacher	CHPLBC-1972-13-625 (mechanism)
Castellano and Schumacher	ZPCFAX-1973-83-54 (mechanism)
Crutzen, et al.	JGREA2-1971-76-1490 (review)
Groth, W.	FDCSB7-1972-53-232
Husain, et al.	JPCMAE-1972-1-69
Jones, I. T. N.	ASSLAD-1971-25-253
Wayne, R. P.	ASSLAD-1971-25-240 (review)
Wayne, R. P.	FDCSB7-1972-53-173 (review)

$M^* = O_2^*(b^1\Sigma_g^+)$

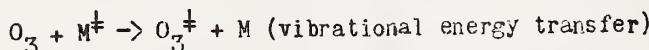
Campbell and Baulch	26BMAD-1972-9-45 (review)
Snelling, D. R.	CJCHAG-1974-52-257

$M^* = O_2^*(?)$

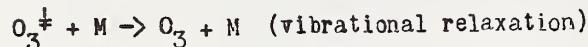
Wayne, R. P.	FDCSB7-1972-53-172 (review)
Wayne, R. P.	FDCSB7-1972-53-230 (calculation)



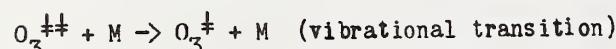
Davenport, et al. FDCSB7-1972-53-230



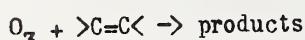
Moore, C. B.	BOOKA7-1967-133 (review)
Rosenberg and Lowenstein	JCPA6-1973-59-2751
Webster, H. A., III	DARBAR-1972-33-673
Webster and Bair	JCPA6-1972-57-3802



Bevan and Johnson	JCF TAR-1973-69-216
Campbell and Baulch	26BMAD-1972-9-45 (review)
Gordon and Lin	CHPLBC-1973-22-262
Rosenberg and Trainor	JCPA6-1973-59-2142
Samoilovich and Filippov	RJPCAR-1962-36-760



Bevan and Johnson	JCF TAR-1973-69-216
Rosenberg and Lowenstein	JCPA6-1973-59-2751



Johnston, H.	*MISCZ-1970-4-TF7/S3 (review)
Stedman, et al.	JPCHAX-1973-77-2511

Part II. Reviews

Bortner, M. H.	BOOKA7-1963-172	(atmospheric reactions)
Bortner, M. H.	XADRCH-1963-AD 417113	(atmospheric reactions)
Campbell and Baulch	26BMAD-1972-9-46	(atomic N reaction)
Carrington, T.	26WVA9-1973-2-7	(chemiluminescent reactions)
Crutzen, P. J.	ASSLAD-1971-25-78	(O , O_2 , O_3 in atmosphere)
Crutzen, et al.	JGREA2-1971-76-1490	(singlet O_2 in atmosphere)
Davidson and Ogryzlo	26WVA9-1973-2-111	(singlet O_2 quenching)
Fontijn, et al.	26WVA9-1973-2-393	(chemiluminescent reactions)
Johnston, H.	*MISCZ-1970-4-TF7/S3	(O , O_2 , O_3 atmospheric reactions)
Kneser, H. O.	BOOKA7-1965-2A-133	(O_2^\ddagger relaxation)

Part II. reviews (continued)

Millikan, R. C.	CSSPAD-1966-20-219	(O_2^+ relaxation)
Moore, C. B.	BOOKA7-1967-133	(O_2^+ , O_3^+ , energy transfer)
Norrish, R. G. W.	PCSLAW-1958-247	(O_3 flash photolysis)
Preston and Cvetanovic	CCHKAZ-1972-4-47	(O_3 decomposition)
Schiff, H. I.	AGEPA7-1972-28-67	(O_3 photochemistry)
Soloukhin, R. I.	23CHAG-1970-7-663	(O , O_2 , O_3 in shock tube)
Stupochenko, et al.	APEGBA-1967-1	(O , O_2 in shock waves)
Thrush, B. A.	ASSLAD-1971-25-231	(O , O_2 , singlet O_2)
Troe, J.	BBPCAX-1968-72-908	(O_2 , O_3)
Vincenti and Kruger	BOOKA7-1965	(O_2)
Wagner, H. G.	27ZEAE-1971-8-4	(O , O_2 in shock waves)
Wayne, R. P.	ASSLAD-1971-24-240	(singlet O_2 , O_3 photochemistry)
Wayne, R. P.	26WVA9-1973-2-481	(singlet O and O_2 in O_3 photochemistry)
Wayne, R. P.	FDCSB7-1972-53-172	(singlet O and O_2 in O_3 photochemistry)
Zafonte, L.	*MISCZ-1970-4-TF7-S2	(singlet O and O_2 in air)

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 $O_2(^1\Sigma^+)$ Moleküle bei niedrigen Drucken," *Ber. Bunsenges. Physik. Chem.* 74, 930 (1970)
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(Astrophys. Space Sci. Library, Vol. 25: Proc. 4th ESRIN-ESLAB Symp., Frascati, Italy, July 1970), Ed., G. Fiocco, p. 261 (Springer-Verlag, Inc., New York, 1971)
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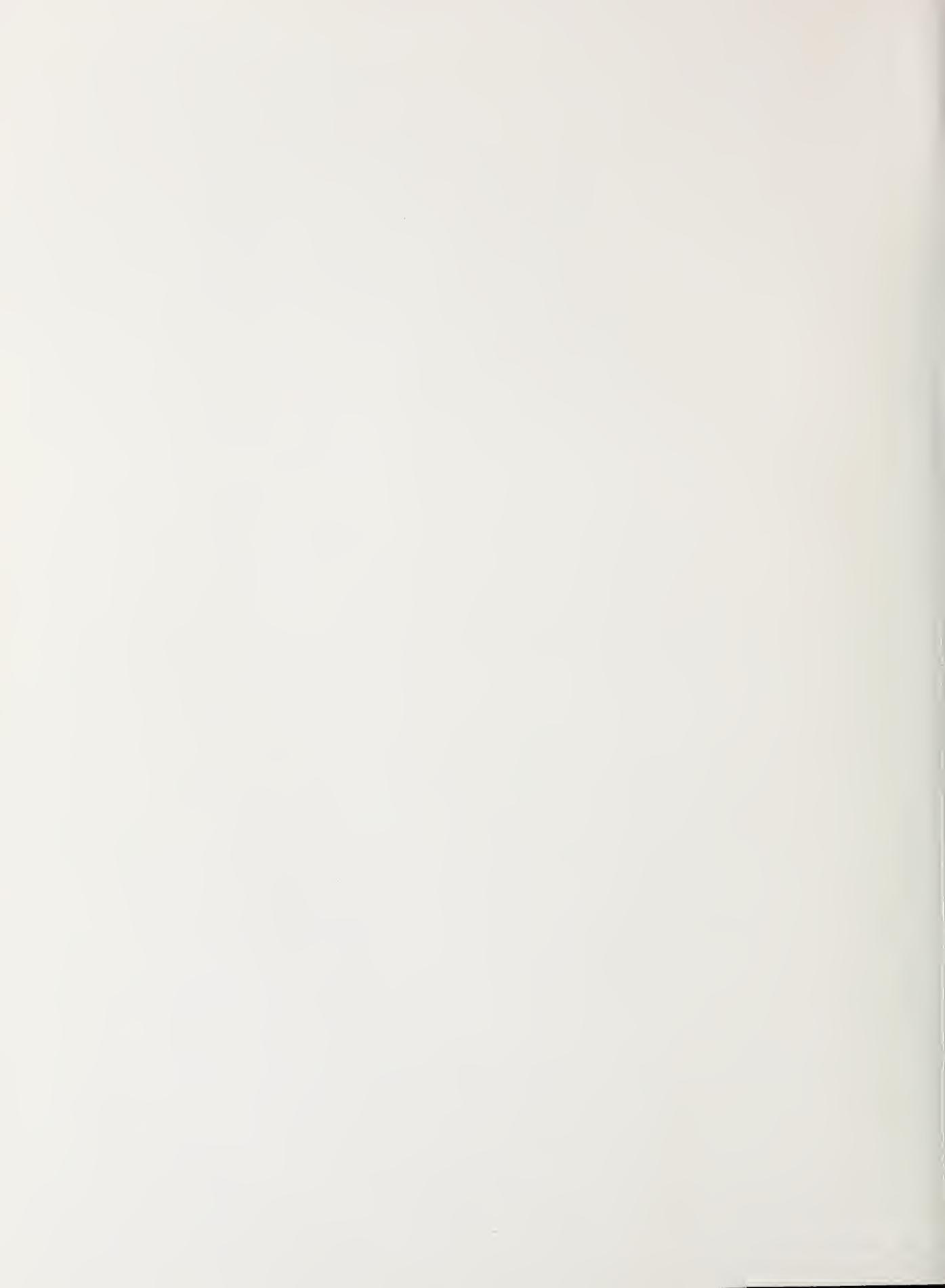
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16. ABSTRACT (A 200-word or less factual summary of most significant information. If document includes a significant bibliography or literature survey, mention it here.) A reaction-oriented list of references is provided for papers and reports published in 1972 and 1973, containing rate data for reactions of N, N ₂ , N ₂ O, N ₂ O ₂ , N ₂ O ₃ , N ₂ O ₄ , N ₂ O ₅ , NO, NO ₂ , NO ₃ , NO ₄ , O, O ₂ and O ₃ with each other. Some reactions of species in excited states are included. This bibliography, covering about 500 papers, extends the coverage of two previous bibliographies on the same subject, COM-71-00941, NBS-OSRDB-71-2, August 1971 and NBS Special Publication 371, February 1973. Some work published prior to 1972 omitted in the previous publications has been included here.						
17. KEY WORDS (six to twelve entries; alphabetical order; capitalize only the first letter of the first key word unless a proper name; separated by semicolons) Bibliography; chemical kinetics; excited state; gas phase; nitrogen atom; nitrogen molecule; nitrogen oxides; oxygen atom; oxygen molecule; ozone						
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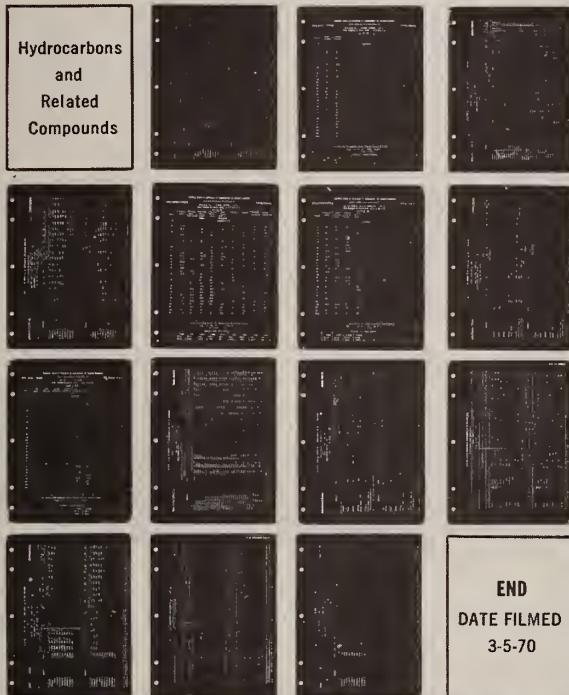
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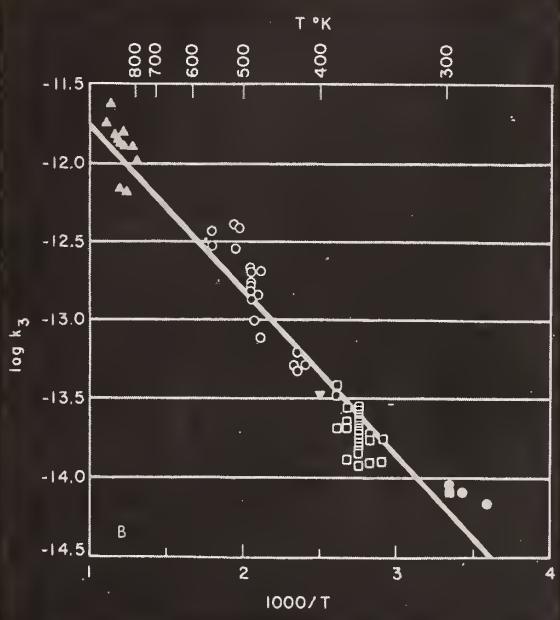
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PHASE REACTIONS OF NITROGEN, OXYGEN, AND NITROGEN OXIDES

by

FRANCIS WESTLEY
Chemical Kinetics Information Center
National Bureau of Standards

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FOREWORD

The National Standard Reference Data System was established in 1963 for the purpose of promoting the critical evaluation and dissemination of numerical data of the physical sciences. The program is coordinated by the Office of Standard Reference Data of the National Bureau of Standards but involves the efforts of many groups in universities, government laboratories, and private industry. The primary aim of the program is to provide compilations of critically evaluated numerical data. These tables are published in the NSRDS-NBS series, which is one of the established publication series of the National Bureau of Standards, as well as through other appropriate channels.

The task of critical evaluation is carried out in various data centers, each with a well-defined technical scope. A necessary preliminary step to the critical evaluation process is the retrieval from the world scientific literature of all papers falling within the scope of the center. Each center, therefore, builds up a comprehensive well-indexed bibliographical file which forms the base for the evaluation task. Since these bibliographical records are potentially of value to many research workers and others interested in the particular technical area, it seems desirable to make them generally available. The present series of publications is an effort to achieve this end.

Further information on NSRDS and the publications which form the primary output of the program may be obtained by writing to the Office of Standard Reference Data, National Bureau of Standards, Washington, D. C. 20234.

David R. Lide, Jr.,
Chief, Office of Standard
Reference Data

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A BIBLIOGRAPHY OF KINETIC DATA ON GAS PHASE REACTIONS
OF NITROGEN, OXYGEN, AND NITROGEN OXIDES*

Francis Westley

A bibliography of references to published papers and reports containing rate data for reactions of N, N_2 , N_3 , $N_2\theta$, $N_2\theta_2$, $N_2\theta_3$, $N_2\theta_4$, $N_2\theta_5$, $N\theta$, NO_2 , NO_3 , NO_4 , θ , θ_2 and θ_3 with each other is presented. In addition two lists of critical reviews dealing with the above reactions are included. Over 900 papers are listed.

Key Words: Bibliography, chemical kinetics, gas phase, nitrogen, oxygen, ozone, nitrogen oxides.

Introduction

This bibliography lists papers and reports on the gas phase reaction kinetics in the nitrogen - oxygen system. Only reactions among N, N_2 , θ , θ_2 , θ_3 and the nitrogen oxides are considered. The material is presented in two ways: (1) by reaction, listing each pertinent article, and (2) in a general reference list, arranged alphabetically by first author.

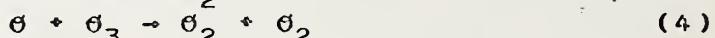
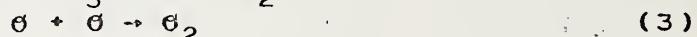
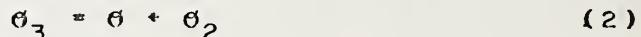
The articles included have been selected from the files of the Chemical Kinetics Information Center. The criterion for inclusion of an article is that there must be some new information on the reaction, when the article in question is compared with the chronologically preceding ones. That is, simple quotations of the results of others and ad hoc guesses have been excluded. There are gray areas, such as the statement of a rate calculated from that of the reverse reaction and the equilibrium constant, or mechanistic information. If the information seemed to be important the reference was included.

* This project is an activity of the Chemical Kinetics Information Center, N.B.S. The work was supported by the Office of Standard Reference Data, N.E.S. and the Naval Ordnance Systems Command GRD 3311 as part of a program to foster the production of tables of chemical kinetics.

These reactions have been studied since the early days of chemical kinetics. The first kinetic information concerning the N - O chemistry was provided by Berthelot in 1878.^{1*} In a very simple experiment, he found that at constant volume and temperature the concentration of ozone decreases with time and the results of his measurements express in a very crude form the rate of ozone disappearance. But the real ground work of the N - O chemical kinetics was laid down in the first decade of the 20th century,² In 1901 Warburg³ measured the overall rate constant for the spontaneous decomposition of ozone:

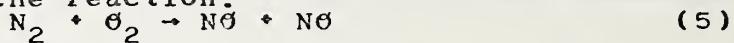


In the following years, similar studies of this reaction were performed by Clement (1904),⁴ Perman and Greaves (1908)⁵ and Clarke and Chapman (1908).⁶ But the most important year of this decade, from the point of view of N - O chemistry, is - no doubt - 1906. In this year, Jahn⁷ measured the overall rate constant for ozone decomposition by using both Warburg's static and Clement's dynamic methods. He proposed a mechanism for the overall reaction (1) by breaking it into three elementary steps:

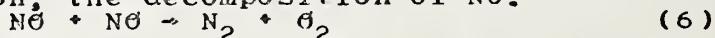


The Jahn mechanism is a milestone in the progress of N - O chemistry. In a modified form it is the current basis for interpreting the decomposition of ozone.

In the same year, Nernst⁸ published a paper reporting the measurement of the rate constant for the formation of NO, according to the reaction:



At the same time Jellinek⁹, reported the rate constant for the reverse reaction, the decomposition of NO:



For more than 40 years rate constants based on these experiments were the only available kinetic data for reactions (5) and (6). In 1948, Gilbert and Daniels¹⁰ published a paper dealing with a theoretical and experimental reevaluation of the NO formation and decomposition kinetics. After mentioning that the equilibrium constant for the reaction $N_2 + O_2 \rightleftharpoons NO + NO$ has been calculated accurately from spectroscopic data, they remarked that the "calculated values are more reliable than the experimental measurements of Nernst and Jellinek, with which they are in fair agreement." This remark about Nernst's and Jellinek's kinetic data is a measure of their endurance. These experimental results have shown a remarkable ability to survive and, together with Jahn's data, are quoted even today.

Experimental work on the nitrogen-oxygen system continues. Reactions in this set are important in the fields of air pollution, upper atmosphere physics and rocketry as well as for tests of chemical kinetics theory. But while continued study may lead to improved rate constants, it increases the task of the user who must select a value. Fortunately, chemists have undertaken reanalyses of the existing data with the goal of establishing "best values." Johnston's recent monograph¹¹ on reactions of neutral oxygen species is a definitive study of the papers listed in Part II(a) of this bibliography.

* Superscript figures indicate literature references at the end of the introduction.

Schofield¹², Kaufman¹³ and Bortner¹⁴ have all recommended rates for various N - O interactions. More definitive studies are needed. The editor hopes that this compilation will assist data evaluators in their work on this system. He looks forward to the day when a survey of the nitrogen - oxygen system can safely recommend the study of a few selected papers instead of the present mass of material.

A much larger bibliography has been published by G. S. Bahn.¹⁵ It has excellent coverage of the report literature as well as of published articles dealing with reaction kinetics of chemical reactions in nitrogen-oxygen system. It lists both sources that report research and simple quotations of the work of others. It has been invaluable in the preparation of the present work. Our bibliography differs from Bahn's in several ways. We have excluded simple quotations as not contributing to the useful body of knowledge. There are several additional reactions included here. At times we have not agreed with Bahn about which reactions were studied by a particular author and, consequently have reclassified a paper. Finally, with the passage of time new work has been reported.

In recent years there has been a large increase in the number of papers on the reactions of atoms or molecules prepared in specific excited states. Only some of these studies are included here. The reader interested in "active nitrogen" should consult the book by Wright and Winkler¹⁶. However, while the bibliography given at the end of their book is impressive (1529 references) these two authors overemphasize the phenomenology of "active nitrogen" and devote only a few pages to its chemical kinetics. We have in general restricted ourselves to rate measurements and our list will be of interest mainly for papers on "active nitrogen" published since 1966. For the study of excited oxygen atoms, the review by McGrath and McGrawey¹⁷ is most useful. The reactions of molecular oxygen in excited singlet state (1Δ , or $1\Sigma_g^+$) are not included in this bibliography. The reader interested in this subject should read the critical reviews by Wayne¹⁸ (for reactions of singlet molecular oxygen in gas phase) and by Gollnick¹⁹ (for reactions of O_2^* in solution). A recent review by Zipf²⁰ on the collisional deactivation of metastable atoms and molecules includes tabulated results for the quenching of N^* , N_2^* , O^* , and O_2^* .

The chemical production of excited states is another topic of interest which was recently discussed in reviews by Carrington and Garvin²¹ and by Thrush²² covering atoms and molecules in vibrational, electronic and rotational excitation (including species of the N - O system), the subject being treated from a mechanistic point of view, rather than a kinetic one.

It is our plan to prepare a separate bibliography on the production and reactions of excited species of the N - O system.

Undoubtedly there are errors of omission, citation and inclusion in this bibliography. For these we apologize. And we thank, in advance, all users who bring these errors to our attention.

This bibliography is not the result of the effort of a single person, but of the whole staff of Chemical Kinetics Information Center. My thanks to all of them.

In particular, I wish to thank Dr. David Garvin, Director of the Center, for his more than helpful suggestions and constant guidance; Mr. James Koch, Supervisor, for tracking down and obtaining papers and reports, otherwise very difficult to obtain; Mrs. Helen Henderson and Mrs. Geraldine Zumwalt, for typing a difficult manuscript with particular care.

NOTE ON THE PREPARATION OF THIS BOOK

The text of this book is stored on magnetic tape in the General Purpose Scientific Document Image Code (GPSDIC). The camera-ready copy was prepared on an IBM 1403 printer equipped with half line spacing and a print train containing the XC8 symbol set.

The General Purpose Scientific Image Code System is described in NBS Technical News Bulletin 54, 35 (Feb. 1970) and earlier references therein.

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GUIDELINES FOR THE USER

This bibliography lists references to published papers and reports in which rate data are reported for reactions of N, N₂, N₃, N₂O, N₂O₂, N₂O₃, N₂O₄, N₂O₅, NO, NO₂, NO₃, NO₄, O, O₂ and O₃ with each other. (No reactions are included that involve other atoms or molecules). As written above, the sequence of these atoms or molecules defines the order in which the reactions are arranged, i. e.: semi-alphabetically, by first reactant.

The bibliography is in three parts:

Part I, Reactions of Nitrogen and Oxygen Species, and

Part II, Reactions of Oxygen Species, are arranged by reaction, following the order indicated above. Both forward and reverse reactions are listed. Reactants are always on the left.

Within each reaction the reactants and products are arranged (separately) according to the same scheme. The general "third body", M, is always last.

This ordering scheme runs counter to chemical conventions that order by oxidation state. It does bring the atom and its parent molecule together for this simple collection. The rule for the arrangement is also simple. It is a character by character comparison, with the priority order being blank, numerals, and then letters.

The references under each reaction list the author(s) and the sources, in the following form:

Author(s)	Source-Year-Volume-Page	Number of Author(s)
Johnston, H. S.	JACSA-1951-73-4542	1
Jones and Davidson	JACSA-1962-84-2868	2
Ashmore, et al.	TFSGA-1962-58-685	3 or more

Variations from this format (which we will call "short reference" are usually in the direction of more explicit specification. These variations are never made in the first two fields, source and year. They are fixed and always present.

The sources are indicated by their ASTM CODEN abbreviations.* A guide to these CODEN precedes Part I. A source code prefixed with an asterisk is a code not in the ASTM CODEN set. These are codes we have assigned for reports from industrial laboratories, research institutes and universities. When the CODEN system adopts appropriate codes they will be replaced. The present, temporary codes usually end with Z or U. They are at times derived from the company name and at times from their stock symbols.

At the end of parts I and II, the sections I (b) and II (b) each include a short list of critical reviews or surveys dealing with the reactions listed in sections I (a) and II (a), respectively.

* L. E. Kuentzel, Editor, "CODEN FOR PERIODICAL TITLES," ASTM DS-23A, (1966). J. G. Blumenthal, M. Karaman, and A. Peters, Editors, "SUPPLEMENT TO CODEN FOR PERIODICAL TITLES," ASTM DS-23A-S1, (1968), ASTM DS-23A-S2, (1969), (American Society for Testing and Materials, 1916 Race St., Philadelphia, Penna., 19103).

Part III is the combined bibliography for Parts I and II, arranged alphabetically by authors. The complete reference citation for each article mentioned is given here. Occasionally explanatory notes are appended. These establish the "bibliographic chain" for closely related papers by the same authors.

Most of the reactions listed in parts I and II show a chemical change. Some of these show a photolytic, chemiluminescent or energy transfer process that occurs simultaneously with chemical change. In addition there are a few reactions that are simply collisional energy transfer or photo-excitation.

The goal here is to survey the chemical reactions in the nitrogen-oxygen system. Energy transfer and photo-excitation processes are included only when they appear (to us or to the original author) to be important in the mechanisms of chemical processes.

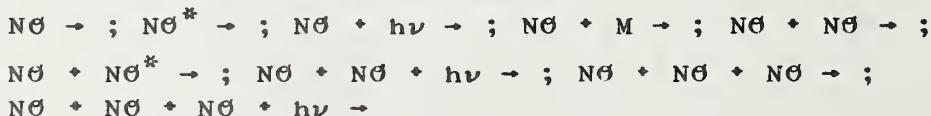
Symbols defining electronic or vibronic states are usually omitted and an excited atom or molecule is indicated by a simple asterisk. However, for a number of papers, the electronic states are indicated in brackets placed after the short reference.

The chemical equations of the overall reactions are not always balanced. An unbalanced equation indicates that the author mentions the reactants and the products of the reaction without the help of an equation, or that the chemical equation given by the author is unbalanced.

Very often, a reference mentioning a reaction without a third body, M, will be found under a heading indicating the same reaction with M on both sides.

In order to render the chemical change occurring in a reaction easily observable to the eye, a reactant, or a product may appear two, or even three times in the same heading. (e.g.: see reactions (3), (4), (5) and (6) in the Introduction).

It is felt that the most profitable method for finding references dealing with a certain reaction included in this bibliography, would be to consider first all headings with the same reactants, with or without third body M, with or without $h\nu$, in excited, or in ground state, and regardless of the products. Only thereafter, should the user accept, or reject a paper, according to his own objective. As an example: Decomposition of NO. The user should consider the reactions having on the left side:



JOURNAL-AND-REPORT-CODES

AANLA	Atti della Accademia Nazionale dei Lincei, Rendiconti, Classe di Scienze Fisiche, Matematiche e Naturali
ACANA	American Chemical Society, Annual Meetings, Abstracts of Papers
ACM&A	American Chemical Society Monograph Series
ACPYA	Acta Physicochimica U.R.S.S.
*ACRPZ	Aerochem Research Laboratories, Report
ACUSA	Acustica
ADCSA	Advances in Chemical Physics
ADPCA	Advances in Photochemistry
*AFCRL	Research Report, Air Force Cambridge Research Laboratories, GAR, L. G. Hanscom Field, Mass.
AGEPA	Annales De Geophysique
AIAJA	A.I.A.A. Journal (American Institute of Aeronautics and Astronautics)
AJCHA	Australian Journal of Chemistry
*AJGAZ	Aerojet - General Corporation, Azusa, California, Reports
ANPYA	Annalen Der Physik (Leipzig)
APNYA	Annals of Physics (New York)
ARPCA	Annual Reports on the Progress of Chemistry (Chemical Society of London)
ASJ&A	Astrophysical Journal
*ASTSZ	Aerospace Corporation, Thermochemistry Research Department, Report
*AVEVZ	AVC& - Everett Research Report
BACCA	Bulletin of the Academy of Sciences of USSR, Division of Chemical Science (Translation) English
BAPSA	Bulletin of the American Physical Society
BBPCA	Berichte Der Bunsengesellschaft Fuer Physikalische Chemie
BBSDA	Boeing Company, Boeing Scientific Research Laboratories, Document (Seattle, Washington)
BERGA	Bergakademie
BICRA	Bulletin of the Institute for Chemical Research, Kyoto University
BJAPA	British Journal of Applied Physics
BMIRA	Battelle Memorial Institute, Research Reports
B&O KA	Book
*BPCHZ	University of Bonn (West Germany) Institute for Physical Chemistry
BSCFA	Bulletin de la Societe Chimique de France
BUPSA	Bulletin of the Academy of Sciences of the U.S.S.R. Physical Series (Translation)
*CARBZ	Cornell Aeronautical Laboratory, Report
CBFMA	Combustion and Flame
CCCCA	Collection of Czechoslovak Chemical Communications
*CCKNZ	Comprehensive Chemical Kinetics

* All codes not preceeded by an asterisk are ASTM C&DEN abbreviations for periodical titles.

CESWA	Combustion, Explosion and Shock Waves (English)
CCGMA	Chemical Communications (London)
CHBEA	Chemische Berichte
CHLSA	Chemicke Listy
CHMBA	Chemistry in Britain
CHPLB	Chemical Physics Letters (Amsterdam)
CHREA	Chemical Reviews
CJCHA	Canadian Journal of Chemistry
*CNVRZ	Convair, San Diego, California, Reports
COREA	Comptes Rendus Hebdomadaires des Seances de l'Academie des Sciences, Paris
CPRCA	Combustion and Propulsion, AGARD Colloquium (Advisory Group for Aeronautical Research and Development)
CSSPA	Chemical Society, Special Publications (London)
DABSA	Dissertation Abstracts, Section B
DANKA	Doklady Akademii Nauk SSSR (Russian)
DASRA	Defense Atomic Support Agency Report (DASA)
DFSOA	Discussions of the Faraday Society
DKPCA	Doklady, Physical Chemistry Section, USSR (English)
*DWCMZ	Dow Chemical Company, Midland, Michigan, Report
*ERDEZ	Explosives Research and Development Establishment Report, Essex, England
*FGRPZ	Fizika Gazorazryadnoi Plazmy (russian)
FPSPA	Fizicheskie Problemy Spektroskopii, Akademia Nauk SSSR (Russian)
*GESLZ	General Electric Company, Space Sciences Laboratory (Missile and Space Division)
*GOTTU	University of Gottingen, Gottingen, Germany, (Reports and Miscellaneous Publications)
*GQRZZ	Grumman Aircraft Engineering Corporation, Report
HCACA	Helvetica Chimica Acta
HTRRA	High Temperature Reaction Rate Data, University of Leeds, Department of Physical Chemistry (Leeds, England)
IAESA	Institute of the Aeronautical Sciences, Preprint
IAPWA	International Journal of Air and Water Pollution
*ICRPZ	Chemical Propulsion Information Agency (CPIA) Published Report
IECFA	Industrial and Engineering Chemistry, Fundamentals
IECHA	Industrial and Engineering Chemistry
IETNA	Institute of Electrical and Electronic Engineers, Transactions on Nuclear Science
IJCKB	International Journal of Chemical Kinetics
IMZGA	Izvestiya Akademii Nauk SSSR, Mekhanika Zhidkosti I Gaza (Russian)
JACSA	Journal of American Chemical Society
JARSA	Journal of the American Rocket Society
JASMA	Journal of the Acoustical Society of America
JASSA	Journal of Aero/Space Sciences
JCPQA	Journal de Chimie Physique
JCPSA	Journal of Chemical Physics

JCS&A	Journal of the Chemical Society (London)
JCTLA	Journal of Catalysis
JES&A	Journal of the Electrochemical Society
JFLSA	Journal of Fluid Mechanics
JGCHA	Journal of General Chemistry of the U.S.S.R.
JGREA	Journal of Geophysical Research
JM&SA	Journal of Molecular Spectroscopy
JNBAA	Journal of Research of the National Bureau of Standards. Series A. Physics and Chemistry
JPCAA	Journal of the Air Pollution Control Association
JPCHA	Journal of Physical Chemistry
JPCUA	Journal of Physical Chemistry (U.S.S.R.)
*JPLCZ	Jet Propulsion Laboratory, University of California, Report
JQSRA	Journal of Quantitative Spectroscopy and Radiative Transfer
KHNPA	Khimicheskaya Nauka I Promyshlennost
KHVKA	Khimiia Vysokikh Energii (Russian)
KICAA	Kinetics and Catalysis (U.S.S.R.) (English)
MDPCA	Memoirs of the Defense Academy, Mathematics, Physics, Chemistry and Engineering (Yokosuka, Japan)
MFMPA	Massachusetts Institute of Technology, Fluid Mechanics Laboratory
MNRAA	Monthly Notices of the Royal Astronomical Society
M&OPHA	Molecular Physics
*MVERZ	Michigan University, Engineering Research Institute, Report
NACGA	Nachrichten Der Akademie Der Wissenschaften in Goettingen, Mathematisch - Physikalische Klasse. IIA.
NACNA	National Advisory Committee for Aeronautics, Technical Notes
NASCA	N.A.S.A. Technical Note (National Aeronautics and Space Administration)
NATUA	Nature (London)
NBTNA	National Bureau of Standards (U.S.) Technical Notes
NSRDA	National Standard Reference Data Series, NBS
OPSUA	Optics and Spectroscopy (U.S.S.R.) (English)
*OSCOU	Ohio State University, Columbus, Ohio (Miscellaneous Publications)
*OSTIZ	Office of Scientific and Technical Information (London)
PAIRA	Pennsylvania State Univ., Ionospheric Research Laboratories
PFLDA	Physics of Fluids
PGARA	Progress in Astronautics and Rocketry
PHCBA	Photochemistry and Photobiology
PHCMB	Physical Chemistry, A Series of Monographs
PHDTA	PhD Thesis
PHMAA	Philosophical Magazine (London)
PHRVA	Physical Review
PHYSA	Physica (Utrecht, Netherlands)

PHZFA	Physikalische Zeitschrift
PICAB	Proceedings of the International Congress on Acoustics
PLSSA	Planetary and Space Science
PNASA	Proceedings of the National Academy of Sciences of The United States
PPS0A	Proceedings of the Physical Society (London)
PRGDA	Proceedings of the International Symposium on Rarefied Gas Dynamics
PRKNA	Progress in Reaction Kinetics
PRLAA	Proceedings of the Royal Society (London) Series A. Mathematical and Physical Sciences
PRLTA	Physical Review Letters
PRSLA	Proceedings of the Royal Society (London)
PYDYA	Pyrodynamics
QUREA	Quarterly Reviews (London)
RADMA	Radium (Paris)
RSCRA	Research Correspondence
SCIEA	Science
SPHDA	Soviet Physics, Doklady (English)
SPHJA	Soviet Physics - Journal of Experimental and Theoretical Physics (English)
SPWPA	Sitzungsberichte der Preussischen Akademie der Wissenschaften, Physikalisch-Mathematische Klasse
*SYCLZ	Symposium on Chemiluminescence
SYMCA	Symposium on Combustion
TEKHA	Teoreticheskaya I Eksperimentalnya Khimiya, Akademiya Nauk Ukrainskoi SSR (Russian)
TFS0A	Transactions of the Faraday Society
TNFKA	Trudy Nauchno-Issledovatel (Skogo Fiziko) Khimicheskogo Instituta Im. L. Ya. Karpova
*TRWSZ	TRW Systems, Redondo Beach, California, Report
*UACHZ	United Aircraft Corporation, Research Laboratories, East Hartford, Connecticut
VMUFA	Vestnik Moskovskogo Universiteta, Seriya III, Fizika, Astronomiya (Russian)
WZTUA	Wissenschaftliche Zeitschrift der Technischen Universitaet Dresden
XCCIA	United States Department of Commerce, Clearinghouse for Scientific and Technical Information, AD.
XN0RA	United States Naval Ordnance Laboratory Report
X0BRA	United States Army Ordnance Corps, Ballistic Research Laboratories Report (Aberdeen Proving Ground, Maryland)
ZAACCA	Zeitschrift Fuer Anorganische Und Allgemeine Chemie
ZACHA	Zeitschrift Fuer Angewandte Chemie
ZACMA	Zeitschrift Fuer Anorganische Chemie
ZEELA	Zeitschrift Fuer Elektrochemie
ZENAA	Zeitschrift Fuer Naturforschung, Teil A. Astrophysik, Physik, Physikalische Chemie
ZEPCA	Zeitschrift Fuer Physikalische Chemie, Stoichiometrie Und Verwandschaftslehre
ZFKHA	Zhurnal Fizicheskoi Khimii (Russian)
Z0KHA	Zhurnal Obshchei Khimii

- ZPCBA Zeitschrift Fuer Physikalische Chemie, Abteilung
B. Chemie der Elementarprozesse, Aufbau Der Materie
- ZPCFA Zeitschrift Fuer Physikalische Chemie, Neue Folge
(Frankfurt)
- ZPMFA Zhurnal Prikladnoi Mekhanikii Tckhnicheskoi
Fiziki (Russian)
- 12GEA Chemical Reactions in the Lower and Upper Atmosphere
Proceedings of an International Symposium Arranged
by the Stanford Research Institute, San Francisco,
California

I.(a) REACTIONS INVOLVING N AND O SPECIES



Black, et al.

JCPSA-1969-51-116 (2D)

Young, et al.

JCPSA-1968-49-4769 (2D)

Zipf, E. C.

CJCHA-1969-47-1863 (2D , or 2P) (review)



Bortner and Kummler

*GESLZ-1969-RPT/GE-9500-ECS-SR-1 (review)



Allen, et al.

PFLDA-1962-5-284

Anderson, J. M.

PPS&A-1957-70-887 (mechanism)

Atallah, S.

*AFCRL-1961-RPT/761 (evaluation)

Avramenko and Krasnen'kov

BACCA-1963-1095

Back, et al.

CJCHA-1959-37-2059

Barnes, et al.

BMIRA-1964-RMI-197-10-2 (review)

Barth, C. A.

*JPLCZ-1961-1-64

Bates, D. R.

AGEPA-1952-8-194 (discussion)

Baulknight, C.

*GQRZZ-1965-RPT/RM-274 (evaluation)

Bayes and Kistiakowsky

JCPSA-1958-29-949 (mechanism)

Bayes and Kistiakowsky

JCPSA-1960-32-992 (mechanism)

Becker, et al.

ZENAA-1969-24-1840

Benson and Fueno

JCPSA-1962-36-1597

Berkowitz, et al.

JCPSA-1956-25-457 (lower limit estimate)

Bortner, M. H.

NBTNA-1969-484 (evaluation)

Bortner and Kummler

DASRA-1967-RPT/1948 (evaluation)

Bortner and Kummler

*GESLZ-1969-RPT/GE-9500-ECS-SR-1 (review)

Brocklehurst and Jennings

PRKNA-1967-4-1 (review)

Camac, et al.

IAESA-1958-26-PR/802

Camm and Keck

*AVEVZ-1959-RPT/67

Campbell and Thrush

CC&MA-1965-250

Campbell and Thrush

TFS&A-1966-62-3366

Campbell and Thrush

prlaa-1967-296-201 (rate and mechanism)

Campbell and Thrush

TFS&A-1968-64-1265

Campbell and Thrush

TFS&A-1968-64-1275

Carruthers, G. R.

PHDTA-1964-Illinois Univ.

Cherry, et al.

*TRWSZ-1967-RPT/08832-6001-T0000

Clyne and Stedman

JPCHA-1967-71-3071

Dunford, H. B.

JPCHA-1963-67-258

Evenson, K. M.

PHDTA-1964-Oregon State Univ.

Evenson and Burch

JCPSA-1966-45-2450

Forst, et al.

JPCHA-1957-61-320

Hammerling, et al.

PFLDA-1959-2-422

Harteck, et al.

JCPSA-1958-29-608 (overall)

Herron, et al.

JCPSA-1958-29-230

Herron, et al.

JCPSA-1959-30-879

Jansson and Middleton

BJAPA-1967-18-1079

Jennings and Linnett

QUREA-1958-12-116 (review)

Kaufman, F.

PFLDA-1963-6-1199

Keck, J. C.

JCPSA-1960-32-1035

Kelly and Winkler

CJCHA-1959-37-62

Kelly and Winkler

CJCHA-1960-38-2514

Kretschmer, C. B.

*AJGAZ-1962-RPT/AN-671

Kretschmer and Petersen

JCPSA-1963-39-1772

Kurzweg and Broida

JMO&A-1959-3-388 (mechanism)

Lin and Fyfe

PFLDA-1961-4-238 (review)

Mannella, G. G.

CHREA-1963-63-1 (review)

Marshall, T. C.

$N + N + M \rightarrow N_2 + M$ (Continued)

Marshall, T. C.	PFLDA-1963-6-1200
Marshall and Kawcyn	PFLDA-1962-5-1657
Mavroyannis and Winkler	CJCHA-1961-39-1601
Miyazaki and Takahashi	MDPCA-1966-6-411
Miyazaki and Takahashi	MDPCA-1967-6-469
Miyazaki and Takahashi	MDPCA-1968-8-791
Morgan and Schiff	CJCHA-1963-41-903
Peng and Pindroh	BBSDA-1963-RPT/D2-13422 (review)
Pillow and Rogers	PPSQA-1963-81-1034
Pratt, N. H.	NGTRA-1963-Pratt (review)
Rabinowitch, E.	TFSGA-1937-33-283 (estimate)
Riozzi, M. A., Jr.	DABSA-1970-30-3594
Rozlovskii, A. I.	KICAA-1967-8-1027 (review)
Schofield, K.	PLSSA-1967-15-643
Shane and Brennen	CHPLB-1969-4-31
Shui, et al.	JCPSCA-1970-53-2547
Shui, et al.	MFMPA-1970-RPT/70-2
Stedman, et al.	JCPSCA-1968-48-4320 (mechanism)
Thrush, B. A.	JCPSCA-1967-47-3691
Wentink, et al.	JCPSCA-1958-29-231
Wright and Winkler	PHCMB-1968-14-161 (review)
Young and Sharpless	BAPSA-1958-3-320
Young and Sharpless	JCPSCA-1963-39-1071
Young and St. John	JCPSCA-1966-45-4156
Young, et al.	JCPSCA-1964-41-1497

 $N + N + M \rightarrow N_2 + M^*$

Young and Black
Young and Sharpless

JCPSCA-1966-44-3741
JCPSCA-1963-39-1071

 $N + N + M \rightarrow N_2^* + M$

Bayes and Kistiakowsky
Bayes and Kistiakowsky
Becker, et al.
Benson, S. W.
Berkowitz, et al.
Brennen and Shane
Brown, R. L.
Harteck, et al.
Jonathan and Petty
McNeal, R. J.
Marshall and McLennan
Miyazaki and Takahashi
Phillips, L. F.
Stedman, et al.
Takahashi, S.
Young and Black

JCPSCA-1958-29-949 (mechanism)
JCPSCA-1960-32-992 (mechanism)
*BPCHZ-1968-SHA/2
JCPSCA-1968-48-1765 (review)
JCPSCA-1956-25-457 (mechanism)
CHPLB-1968-2-143
JCPSCA-1970-52-4604
*SYCLZ-1965-91
JCPSCA-1969-50-3804 (mechanism)
BAPSA-1967-12-542
IETNA-1963-10-124
MDPCA-1967-7-1155 (mechanism)
CJCHA-1963-41-732 (mechanism)
JCPSCA-1968-48-4320 (mechanism)
MDPCA-1967-7-475
JCPSCA-1966-44-3741

 $N + N + M \rightarrow N_2 + M + h\nu$

Benson, S. W.
Berkowitz, et al.

Campbell and Thrush
Gross, R. W. F.
Harteck, et al.
McNeal, R. J.
Miyazaki and Takahashi
Miyazaki and Takahashi
Miyazaki and Takahashi

Miyazaki and Takahashi
Takahashi, S.

JCPSCA-1968-48-1765 (review)
JCPSCA-1956-25-457 (rate and mechanism)
PRLAA-1967-296-201
JCPSCA-1968-48-1302
*SYCLZ-1965-91
BAPSA-1967-12-542
MDPCA-1966-6-305 (rate)
MDPCA-1967-6-469 (mechanism)
MDPCA-1967-7-1155 (rate and mechanism)
MDPCA-1968-8-791
MDPCA-1967-6-475

$N + N + M \rightarrow N_2 + M + h\nu$ (Continued)

Takahashi, S.
Young and Sharpless

MDPCA-1966-5-305 (rate)
JCPSA-1963-39-1071

$N + N_2 \rightarrow N + N_2$ (exchange)

Bar-Nun and Lifshitz

JCPSA-1967-47-2878

$N + N_3 \rightarrow N_2 + N_2$

Trautz, M.

ZEELA-1919-25-297

$N + N_2\theta \rightarrow N_2 + N\theta$

Henriques, et al.
Kistiakowsky and Volpi

JCPSA-1938-6-518
JCPSA-1957-27-1141 (upper limit
estimate)

Pease, R. N.
Zelikoff and Aschenbrand

JCPSA-1939-7-749 (mechanism)
JCPSA-1954-22-1685 (mechanism)

$N^* + N_2\theta \rightarrow N_2 + N\theta^*$

Black, et al.

JCPSA-1969-51-116 [$N^*(^2D)$; $N\theta^*(B^2\Pi_r)$]

$N + N\theta \rightarrow N_2 + \theta$

Atallah, S.
Back and Mui
Barnes, et al.
Bates, D. R.
Baulch, et al.
Bortner, M. H.
Bortner and Kummler
Cherry, et al.
Clyne and Thrush
Clyne and Thrush
Davidson, N.
Doering and Mahan
Elias, L.
Fenimore and Jones
Fontijn et al.
Glick, et al.
Heicklen and Cohen
Herron, J. T.
Herron, J. T.
Kaufman and Decker
Kaufman and Kelso
Kaufman and Kelso
Kaufman and Kelso
Kistiakowsky and Volpi

Kistiakowsky and Volpi

Kretschmer, C. B.
Lin and Fyfe
Mayer, S. W.
Mayer, S. W.
Peng and Pindroh
Phillips and Schiff
Pratt, N. H.
Rozlovskii, A. I.
Rozlovskii, A. I.
Rozlovskii and Rodin
Sagert and Thrush
Schiff, H. I.

*AFCRL-1961-RPT/761 (evaluation)
JPCHA-1962-66-1362 (product yield)
BMIRA-1964-BMI-197-10-2 (review)
AGEPA-1952-8-194
HTRRA-1969-4-1 (evaluation)
NBTNA-1969-TN-484 (evaluation)
*GESLZ-1969-RPT/GE-9500-ECS-SR-1 (review)
*TRWSZ-1967-RPT/08832-6001-T0000
NATUA-1961-189-56
PRLAA-1961-261-259
*AVEVZ-1958-RPT/32
JCPSA-1961-34-1617
JCPSA-1965-42-4311 (product yield)
JPCHA-1957-61-654
CJCHA-1964-42-2440
JCPSA-1957-27-850
ADPCA-1968-5-227 (review)
JCPSA-1961-35-1138
JNBAA-1961-65-411
SYMCA-1959-7-57
JCPSA-1955-23-1702
JCPSA-1957-27-1209 (mechanism)
SYMCA-1959-7-53 (review)
JCPSA-1957-27-1141 (lower limit
estimate)
JCPSA-1958-28-665 (lower limit
estimate)
*AJGAZ-1962-RPT/AN-671 (estimate)
PFLDA-1961-4-238 (review)
JPCHA-1967-71-4159 (calculation)
JPCHA-1969-73-3941 (calculation)
BBSDA-1963-RPT/D2-13422 (review)
JCPSA-1962-36-1509
NGTRA-1963-RPT (review)
ZFKHA-1956-30-1349
KICAA-1967-8-1027 (review)
DKPCA-1967-177-819 (review)
DFSGA-1964-37-223 (review)
AGEPA-1964-20-115 (review)

N + NO → N₂ + O (Continued)

Spealman and Rodebush
 Takezaki and Mori
 Verbeke and Winkler
 Vetter, K.
 Wise and Frech
 Wray and Teare
 Zeldovich, J.

JACSA-1935-57-1474 (mechanism)
 BICRA-1967-46-388
 JPCHA-1960-64-319
 ZEELA-1949-53-369
 JCPSA-1952-20-1724 (mechanism)
 JCPSA-1962-36-2582
 ACPYA-1946-21-577



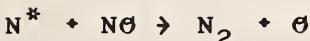
Bortner and Kummler

*GESLZ-1969-RPT/GE-9500-ECS-SR-1 (review)



Kaufman and Kelso
 Morgan and Schiff
 Phillips and Schiff
 Phillips and Schiff

JCPSA-1958-28-510 (mechanism)
 CJCHA-1963-41-903
 JCPSA-1962-36-1509
 JCPSA-1962-36-3283



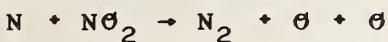
Young, et al.

JCPSA-1968-49-4769 (2D)



Bortner and Kummler
 Bortner and Kummler
 Pease, R. N.

DASRA-1967-RPT/1948 (evaluation)
 *GESLZ-1969-RPT/GE-9500-ECS-SR-1 (review)
 JCPSA-1939-7-749 (mechanism)



Liuti, et al.
 Phillips and Schiff

AANLA-1968-45-364
 JCPSA-1965-42-3171



Bortner and Kummler
 Clyne and Thrush
 Liuti, et al.
 Phillips and Schiff
 Schiff, H. I.
 Spealman and Rodebush

*GESLZ-1969-RPT/GE-9500-ECS-SR-1 (review)
 TFSOA-1961-57-69
 AANLA-1968-45-364
 JCPSA-1965-42-3171
 AGEPA-1964-20-115 (review)
 JACSA-1935-57-1474 (mechanism)



Bortner and Kummler
 Clyne and Thrush
 Kaufman and Kelso
 Kistiakowsky and Volpi
 Liuti, et al.
 Phillips and Schiff
 Schiff, H. I.

*GESLZ-1969-RPT/GE-9500-ECS-SR-1 (review)
 TFSOA-1961-57-69
 SYMCA-1959-7-53 (review)
 JCPSA-1957-27-1141
 AANLA-1968-45-364
 JCPSA-1965-42-3171
 AGEPA-1964-20-115 (review)



Clough and Thrush

PRLAA-1969-309-419 (vibr. excit.
 mechanism)



Baulch, et al.

HTRRA-1969-4-57 (evaluation)

N + NO₂ → NO + NO (Continued)

Bortner and Kummller
Clyne and Thrush
Doering and Mahan
Kaufman and Kelso
Liuti, et al.
Mayer, S. W.
Phillips and Schiff
Schiff, H. I.
Speelman and Rodebush
Vetter, K.

*GESLZ-1969-RPT/GE-9500-ECS-SR-1 (review)
TFSOA-1961-57-69
JCPSA-1961-34-1617
SYMCA-1959-7-53 (mechanism)
AANLA-1968-45-364
JPCHA-1967-71-4159 (calculation)
JCPSA-1965-42-3171
AGEPA-1964-20-115 (review)
JACSA-1935-57-1474 (mechanism)
ZEELA-1949-53-376

N + NO₂ → NO + NO*

Clough and Thrush

PRLAA-1969-309-419 (vibr. excit.
mechanism)

N + NO₂ → products

Verbeke and Winkler

JPCHA-1960-64-319

N + O → NO + hν

Bortner and Kummller

*GESLZ-1969-RPT/GE-9500-ECS-SR-1 (review)

N + O + M → NO + M

Barnes, et al.
Barth, C. A.
Bates, D. R.
Baulch, et al.
Baulknight, C.
Bortner, M. H.
Bortner and Kummller
Bortner and Kummller
Campbell and Thrush
Campbell and Thrush

Campbell and Thrush
Campbell and Thrush
Cherry, et al.
Freedman and Daiber
Harteck, et al.
Ionov and Nikolaev
Kretschmer, C. B.
Kretschmer and Petersen
Lin and Fyfe
Mavroyannis and Winkler
Peng and Pindroh
Pratt, N. H.
Rozlovskii, A. I.
Sagert and Thrush
Wray and Teare
Young and Sharpless
Young and St. John
Young, et al.

BMIRA-1964-RMI-197-10-2 (review)
*JPLCZ-1961-1-64
AGEPA-1952-8-194
HTRRA-1969-4-24 (evaluation)
*GQRZZ-1965-RPT/RM-274 (evaluation)
NBTNA-1969-TN-484 (evaluation)
DASRA-1967-RPT/1948 (evaluation)
*GESLZ-1969-RPT/GE-9500-ECS-SR-1 (review)
TFSOA-1966-62-3366
PRLAA-1967-296-222 (rate and
mechanism)

TFSOA-1968-64-1265
TFSOA-1968-64-1275
*TRWSZ-1967-RPT/08832-6001-T0000
JCPSA-1961-34-1271
JCPSA-1958-29-608
IMZGA-1968-154
*AJGAZ-1962-RPT/AN-671
JCPSA-1963-39-1772
PFLDA-1961-4-238 (review)
CJCHA-1961-39-1601
BBSDA-1963-RPT/D2-13422 (review)
NGTRA-1963-Pratt (review)
KICAA-1967-8-1029 (review)
DFSOA-1964-37-223 (review)
JCPSA-1962-36-2582
JCPSA-1963-39-1071
JCPSA-1966-45-4156
JCPSA-1964-41-1497

N + O + M → NO + M*

Tanaka, Y.
Young and Black
Young and Sharpless

JCPSC-1954-22-2045 (mechanism)
JCPSC-1966-44-3741
JCPSC-1963-39-1071

N + O + M → NO* + M

Callear and Smith
Tanaka, Y.

DFSOA-1964-37-96
JCPSC-1954-22-2045 (mechanism)

N + O + M → NO* + M (Continued)

Vanderslice, et al.
Young and Black

JCPSA-1959-31-738 (mechanism)
JCPSA-1966-44-3741

N + O + M → NO + M + hν

Gross and Cohen
Kaufman and Kelso
Takahashi, S.
Young and Sharpless
Young and Sharpless

JCPSA-1968-48-2582
JCPSA-1957-27-1209 (mechanism)
MDPCA-1968-8-611
DFSOA-1962-33-228 (mechanism)
JCPSA-1963-39-1071

N + O₂ → NO + O

Atallah, S.
Barnes, et al.
Baulch, et al.
Becker, et al.
Bortner, M. H.
Bortner and Kummler
Camac and Feinberg
Cherry, et al.
Clark and Wayne
Clyne and Thrush
Clyne and Thrush
Davidson, N.
Fenimore and Jones
Glick, et al.
Heicklen and Cohen
Kaufman and Decker
Kaufman and Kelso
Kistiakowsky and Volpi
Kretschmer, C. B.
Kretschmer and Petersen
Lin and Fyfe
Mavroyannis and Winkler
Mayer, S. W.
Miyazaki and Takahashi
Peng and Pindroh
Pratt, N. H.
Rozlovskii, A. I.
Schiff, H. I.
Schofield, K.
Tunder, et al.
Vetter, K.
Vlastaras and Winkler
Westenberg, et al.
Wilson, Wm. E., Jr.
Wilson, Wm. E., Jr.
Wray and Teare
Zeldovich, J.

*AFCRL-1961-RPT/761 (best value)
BMI RA-1964-RMI-197-10-2 (review)
HTRRA-1969-4-11 (evaluation)
ZENAA-1969-24-1280
NBTNA-1969-TN-484 (evaluation)
*GESLZ-1969-RPT/GE-9500-ECS-SR-1 (review)
SYMCA-1967-11-137 (review)
*TRWSZ-1967-RPT/08832-6001-T0000
PRLAA-1970-316-539
NATUA-1961-189-56
PRLAA-1961-261-259
*AVEVZ-1958-RPT/32 (review)
JPCHA-1957-61-654 (review)
JCPSA-1957-27-850 (doubtful)
ADPCA-1968-5-227 (review)
SYMCA-1959-7-57 (reverse)
JCPSA-1955-23-1702
JCPSA-1957-27-1141
*AJGAZ-1962-RPT/AN-671
JCPSA-1963-39-1772
PFLDA-1961-4-238 (review)
12GEA-1961-287
JPCHA-1967-71-4159 (calculation)
MDPCA-1968-8-469
BBSDA-1963-RPT/D2-13422 (review)
NGTRA-1963-Pratt (review)
KICAA-1967-8-1027 (review)
AGEPA-1964-20-115 (review)
PLSSA-1967-15-643
*ASTSZ-1967-RPT/TR-1001(9210-02)-1
ZEELA-1949-53-369 (reverse)
CJCCHA-1967-45-2837
CHPLB-1970-7-597
JCPSA-1967-46-2017
*ICRPZ-1967-1-147
JCPSA-1962-36-2582
ACPYA-1946-21-577

N + O₂* → NO + O

Bortner and Kummler
Clark and Wayne

*GESLZ-1969-RPT/GE-9500-ECS-SR-1 (review)
CHPLB-1969-3-405 (¹Δ_g) (upper limit
estimate)
PRLAA-1970-316-539 (¹Δ_g)
JGREA-1968-73-2421 (¹Δ_g) (evaluation)
CHPLB-1970-7-597

N + O₃ → NO + O₂

Bortner and Kummler

*GESLZ-1969-RPT/GE-9500-ECS-SR-1 (review)

N + O₃ → NO + O₂ (Continued)

Chen and Taylor
 Phillips and Schiff
 Schiff, H. I.
 Schofield, K.

JCPUSA-1961-34-1344
 JCPUSA-1962-36-1509
 AGEPA-1964-20-115 (review)
 PLSSA-1967-15-643



Becker, et al.
 Benson, S. W.
 Berkowitz, et al.
 Brennen, W.
 Brennen and Shane
 Dunford, et al.
 Fink and Welge
 Harteck, et al.
 Jeunehomme, M.
 Jeunehomme, M.
 Jeunehomme and Duncan
 Jonathan and Petty
 Keck, et al.
 Miyazaki and Takahashi
 Miyazaki and Takahashi
 Takahashi, S.
 Thrush, B. A.
 Tilford and Wilkinson
 Zare, et al.
 Zipf, E. C., Jr.

*BPCHZ-1968-SHA/2
 JCPUSA-1968-48-1765 (review)
 JCPUSA-1956-25-457 (mechanism)
 JCPUSA-1966-44-1793
 CHPLB-1968-2-143
 CJCHA-1964-42-2504 (review)
 ZENAA-1964-19-1193
 *SYCLZ-1965-91
 JCPUSA-1966-44-2672
 JCPUSA-1966-45-1805
 JCPUSA-1964-41-1692
 JCPUSA-1969-50-3804
 APNYA-1959-7-1
 MDPKA-1967-6-469
 MDPKA-1967-7-1155 (mechanism)
 MDPKA-1967-7-475
 JCPUSA-1967-47-3691 (review)
 JMDSA-1964-12-397 (mechanism)
 JMDSA-1965-15-117
 JCPUSA-1963-38-2034



Calo and Axtmann
 Fink and Welge

JCPUSA-1971-54-1332
 ZENAA-1964-19-1193



Beyer and Welge

JCPUSA-1969-51-5323 (4P)



Beyer and Welge

JCPUSA-1969-51-5323 (2D and 2P)



Appleton, et al.
 Atallah, S.
 Baulknight, C.
 Bortner, M. H.
 Byron, S.
 Cary, B.
 Hall, et al.
 Peng and Pindroh
 Pratt, N. H.
 Shui, et al.
 Svetsov, et al.
 Troe and Wagner
 Tunder, et al.
 Wray, K. L.
 Wray and Byron
 Wray, et al.
 Young, et al.

JCPUSA-1968-48-599
 *AFCRL-1961-RPT/761 (best value)
 *GQRZZ-1965-RPT/RM-274 (evaluation)
 NBTNA-1969-TN-484 (evaluation)
 JCPUSA-1966-44-1378
 PFLDA-1965-8-26
 JASSA-1962-29-1038 (review)
 BBSDA-1963-RPT/D2-13422 (review)
 NGTRA-1963-Pratt (review)
 JCPUSA-1970-53-2547
 KHVKA-1967-1-174
 BBPCA-1967-71-937 (review)
 *ASTSZ-1967-RPT/TR-1001(9210-02)-1
 PGARA-1962-7-181 (review)
 PFLDA-1966-9-1046
 SYMCA-1962-8-328 (review)
 JCPUSA-1964-40-117 (product yield)



Berkowitz, et al.
 Phillips, L. F.
 Shui, et al.
 Tilford and Wilkinson

JCPSCA-1956-25-457
 CJCHA-1963-41-732 (mechanism)
 JCPSCA-1970-53-2547 (mechanism)
 JMOSA-1964-12-347 (mechanism)



Lutz, B. L.
 Wray, K. L.

JCPSCA-1969-51-706
 JCPSCA-1966-44-623



Basco, et al.
 Callear and Smith
 Callear and Smith
 Callear and Smith
 Callear and Smith

PRLAA-1962-269-180
 NATUA-1962-196-888
 DFSOA-1964-37-96
 TFSOA-1963-59-1735 (mechanism)
 TFSOA-1965-61-2383 (estimation)



Bayes and Kistiakowsky
 Bayes and Kistiakowsky
 Becker, et al.

JCPSCA-1958-29-949 (mechanism)
 JCPSCA-1960-32-992
 *BPCHZ-1968-SHA/2

Black, et al.

JCPSCA-1969-51-116 ($A^3\Sigma_u^+$)

Brennen and Shane

CHPLB-1968-2-143

Brown, R. L.

JCPSCA-1970-52-4604

Dressler, K.

JCPSCA-1959-30-1621

Dugan, C. H.

JCPSCA-1967-47-1512 (review)

Dunford, H. B.

JPCHA-1963-67-258

Dunford, et al.

CJCHA-1964-42-2504 (review)

Herron, J. T.

JNBAA-1965-69-287 (review)

Huber and Kantrowitz

JCPSCA-1947-15-275

Jarmain, et al.

ASJBA-1953-118-228

Jarmain, et al.

ASJBA-1955-122-55

Jeunehomme, M.

JCPSCA-1966-45-1805

Jeunehomme and Duncan

JCPSCA-1964-41-1692

Johnson and Fowler

JCPSCA-1970-53-65

Jonathan and Petty

JCPSCA-1969-50-3804

Kaufman and Kelso

JCPSCA-1958-28-510 (mechanism)

Lichten, W.

JCPSCA-1957-26-306

Lukasik and Young

JCPSCA-1957-27-1149

Miyazaki and Takahashi

MDPCA-1967-6-469

Miyazaki and Takahashi

MDPCA-1967-7-1155

Morgan and Schiff

CJCHA-1963-41-903

Muschlitz and Goodman

JCPSCA-1953-21-2213

Noxon, J. F.

JCPSCA-1962-36-926

Phillips, L. F.

CJCHA-1963-41-732 (mechanism)

Setser, et al.

JCPSCA-1970-53-1004

Shemansky, D. E.

JCPSCA-1969-51-5487

Sheridan and Peterson

JCPSCA-1969-51-3574

Stedman, et al.

JCPSCA-1968-48-4320

Takahashi, S.

MDPCA-1967-7-475

Thrush, B. A.

JCPSCA-1967-47-3691 (review)

Wilkinson and Mulliken

JCPSCA-1959-31-674

Young, R. A.

CJCHA-1966-44-1171

Young and St. John

JCPSCA-1968-48-895

Young, et al.

JCPSCA-1968-49-4769 ($A^3\Sigma_u^+$)

Young, et al.

JCPSCA-1969-50-303

Zipf, E. C.

CJCHA-1969-47-1863 (review)



Parker, et al.
Setser, et al.

JASMA-1953-25-263
JCPSCA-1970-53-1004



Bethe and Teller
Blackman, V.
Calo and Axtmann
Dickens and Ripamonti
Duff and Davidson
Gaydon and Hurle
Hanson and Baganoff
Henderson, M. C.
Henry, P. S. H.
Knudsen, V. Ø.
Millikan and White
Millikan and White
Parker, J. G.
Penny and Aroeste
Schwartz and Herzfeld
Schwartz, et al.
Shilling and Partington
Strehlow and Cohen
White and Millikan
Zipf, E. C.

*MUERZ-1941-RPT/X-117-BRL (calculation)
JFLSA-1956-1-61
JCPSCA-1971-54-1332
TFSOA-1961-57-735 (calculation)
JCPSCA-1959-31-1018 (calculation)
SYMCA-1962-8-309
JCPSCA-1970-53-4401
JASMA-1962-34-349
NATUA-1932-129-200 (calculation)
JASMA-1933-5-112
JCPSCA-1963-39-98
JCPSCA-1963-39-3209 (evaluation)
JCPSCA-1964-41-1600
JCPSCA-1955-23-1281 (calculation)
JCPSCA-1954-22-767 (calculation)
JCPSCA-1952-20-1591 (calculation)
PHMAA-1928-6-920
JCPSCA-1959-30-257
AIAJA-1964-2-1844
CJCHA-1969-47-1863 (review)



Becker, and Bayes
Brennen and Kistiakowsky
Callear and Smith
Callear and Smith
Callear and Wood
Calo and Axtmann
Dugan, C. H.
Freeman and Phillips
Noxon, J. F.
Provencher and McKenney
Stedman, et al.
Welge, K. H.
Wright and Winkler
Young and St. John
Young and St. John
Young, et al.

JPCHA-1967-71-371
JCPSCA-1966-44-2695
DFSOA-1964-37-96
TFSOA-1965-61-2383 (mechanism)
CHPLB-1970-5-128
JCPSCA-1971-54-1332
JCPSCA-1966-45-87 (estimation)
JPCHA-1964-68-362
JCPSCA-1962-36-926
CHPLB-1970-5-26
JCPSCA-1968-48-4320
JCPSCA-1966-45-166 (mechanism)
CJCHA-1962-40-5
JCPSCA-1968-48-898
JCPSCA-1968-48-2572
JCPSCA-1968-49-4769 [$N_2(A^3\Sigma_u^+)$ and
 $M^* = N\Theta^*(^2\Pi_r)]$

Young, et al.

JCPSCA-1969-50-303



Campbell and Thrush

TFSOA-1969-65-32



Bar-Nun and Lifshitz

JCPSCA-1967-47-2878



Tunder, et al.

*ASTSZ-1967-RPT/TR-1001(9210-02)-1

N_2^* + NO → . . .

Fontijn, et al.

$N_2 + O \rightarrow N + NO$

Barnes, et al.
 Baulch, et al.
 Bortner, M. H.
 Bortner and Kummler
 Bortner and Kummler
 Camac and Feinberg
 Fenimore and Jones
 Glick, et al.
 Peng and Pindroh
 Pratt, N. H.
 Tunder, et al.
 Vetter, K.
 Wray, K. C.
 Wray and Teare
 Wray, et al.
 Wray, et al.
 Zeldovich, J.

$N_2 + O^* \rightarrow N_2O + h\nu$

Cadle, R. D.

$N_2 + O + M \rightarrow N_2O + M$

Bates and Witherspoon
 Baulknight, C.
 Bortner and Kummler
 Bortner and Kummler
 Davidson, N.
 Groth and Schierholz
 Groth and Schierholz
 Harteck and Dondes
 Warneck and Sullivan

$N_2 + O^* + M \rightarrow N_2O + M$

Bates and Witherspoon
 Bortner and Kummler
 Cadle, R. D.
 DeMore and Raper
 DeMore and Raper
 Groth and Schierholz
 Norrish and Wayne
 Warneck and Sullivan

$N_2 + O^* + M \rightarrow N_2O^* + M$

DeMore and Raper
 Snelling and Bair

$N_2 + O_2 \rightarrow N + NO_2$

Tunder, et al.

$N_2 + O_2 \rightarrow N_2O + O$

Tunder, et al.

CJCHA-1964-42-2440

BMIRA-1964-RMI-197-10-2 (review)
 HTRRA-1969-4-7 (evaluation)
 NBTNA-1969-TN-484 (evaluation)
 DASRA-1967-RPT/1948 (evaluation)
 *GESLZ-1969-RPT/GE-9500-ECS-SR-1 (review)
 SYMCA-1967-11-137
 JPCHA-1957-61-654
 JCPSA-1957-27-850
 BBSDA-1965-RPT/D2-13422 (review)
 NGTRA-1963-Pratt (review)
 *ASTSZ-1967-RPT/TR-1001(9210-02)-1
 ZEELA-1949-53-376
 PGARA-1962-7-181 (review)
 JCPSA-1962-36-2582
 SYMCA-1962-8-328 (review)
 JCPSA-1970-53-4131
 ACPYA-1946-21-577

DFSOA-1964-37-66 (evaluation)

MNRAA-1952-112-101
 *GORZZ-1965-RPT/RM-274 (evaluation)
 DASRA-1967-RPT/1948 (evaluation)
 *GESLZ-1969-RPT/GE-9500-ECS-SR-1 (review)
 *AVEVZ-1958-RPT/32 (review)
 CHBEA-1957-90-987 (mechanism)
 JCPSA-1957-27-973 (mechanism)
 JCPSA-1954-22-758
 BBPCA-1968-72-159

MNRAA-1952-112-101 (mechanism)
 *GESLZ-1969-RPT/GE-9500-ECS-SR-1 (review)
 DFSOA-1964-37-66 (evaluation)
 JCPSA-1962-37-2048 (quantum yield)
 CJCHA-1963-41-808 (quantum yield)
 JCPSA-1957-27-973 (mechanism)
 PRLAA-1965-288-200 (mechanism)
 BBPCA-1968-72-159 (mechanism)

ASJOA-1964-139-1381 (mechanism)
 JCPSA-1967-47-228

*ASTSZ-1967-RPT/TR-1001(9210-02)-1

*ASTSZ-1967-RPT/TR-1001(9210-02)-1



Baulch, et al.
Cainac and Feinberg
Davidson, N.
Frank-Kamenetzky, D.

Gilbert and Daniels
Glick, et al.
Hirschfelder, et al.
Nernst, W.
Peng and Pindroh
Trautz, M.
Vetter, K.
Vetter, K.
Wecker and Baumer
Wray, K. L.
Wray and Teare
Zeldovich, J.



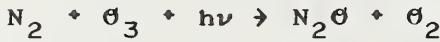
Bates, D. R.
Bates and Witherspoon



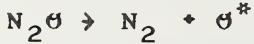
Bates and Witherspoon
Groth and Schierholz
Groth and Schierholz
Harteck and Dondes



Bates and Witherspoon
Harteck and Dondes



Paper and DeMore



Graevskii, A. N.
Reuben and Linnett
Troe and Wagner



Bell, et al.
DeMore and Raper
Fishburne and Edse
Friedman and Bigeleisen
Gill and Laidler
Johnston, H. S.
Johnston, H. S.
Johnston and White
Lindars and Hinshelwood
Nikitin, E. E.
Snelling and Bair
Wieder and Marcus

HTPRA-1969-4-36 (evaluation)
SYMCA-1967-11-137
*AVEVZ-1958-RPT/32 (review)
ACPYA-1947-22-27 (rate and mechanism)
IECHA-1948-40-1719 (review)
JCPSA-1957-27-850
JPCHA-1953-57-403
ZACMA-1906-49-213
BBSDA-1963-RPT/D2-13422 (review)
ZAACA-1916-96-1 (review)
ZEELA-1949-53-369 (mechanism)
ZEELA-1949-53-376 (mechanism)
PYDYA-1966-4-57
PGARA-1962-7-181 (review)
JCPSA-1962-36-2582
ACPYA-1946-21-577 (rate and mechanism)

AGEPA-1952-8-194
MNRAA-1952-112-101 (review)

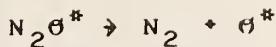
MNRAA-1952-112-101 (review)
CHBEA-1957-90-987 (mechanism)
JCPSA-1957-27-973 (mechanism)
JCPSA-1954-22-758 (mechanism)

MNRAA-1952-112-101 (mechanism)
JCPSA-1954-22-758 (mechanism)

JCPSA-1964-40-1053 (quantum yield)

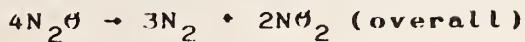
SPHJA-1965-21-768 (review)
TFSθA-1959-55-1543 (review)
BBPCA-1967-71-937 (review)

JCSθA-1957-1474 (mechanism)
ASJθA-1964-139-1381 (evaluation)
JCPSA-1964-41-1297 (mechanism)
JACSA-1953-75-2215 (mechanism)
CJCHA-1958-36-1570 (review)
JCPSA-1951-19-663 (evaluation)
JCPSA-1952-20-1103 (evaluation)
JCPSA-1954-22-1969 (evaluation)
PRLAA-1955-231-178 (mechanism)
DANKA-1959-129-157 (calculation)
JCPSA-1967-47-228
JCPSA-1962-37-1835 (evaluation)



DeMore and Raper
Snelling and Bair

ASJMA-1964-139-1381 (evaluation)
JCPSA-1967-47-228



Graven, W. M.
Joshi, S. S.
Joshi, S. S.
Joshi, S. S.
Joshi, S. S.
Kueck and Brewer
Snelling and Bair

JACSA-1959-81-6190
TFSMA-1927-23-227
TFSMA-1929-25-108
TFSMA-1929-25-118
TFSMA-1929-25-137
JCPSA-1932-36-2395
JCPSA-1967-47-228



Bates and Witherspoon
Doering and Mahan
Doering and Mahan
Young, et al.

MNRAA-1952-112-101 (calculation)
JCPSA-1961-34-1617
JCPSA-1962-36-1682
JCPSA-1968-49-4769 (quantum yield)



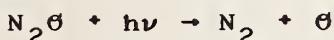
Young, et al.

JCPSA-1968-49-4769 (quantum yield)



Greiner, N. R.
MacDonald, J. Y.
Noyes, W. A., Jr.
Preston and Cvetanovic

JCPSA-1967-47-4373 (quantum yield
and mechanism)
JCSMA-1928-1 (quantum yield
and mechanism)
JCPSA-1937-5-807 (quantum yield
and mechanism)
*CCKNZ-1971-4-preprint (review and
mechanism)



Castellion and Noyes
Doering and Mahan
Doering and Mahan
Murad and Noyes
Noyes, W. A., Jr.
Young, et al.
Zelikoff and Aschenbrand
Zelikoff and Aschenbrand

JACSA-1957-79-290 (quantum yield)
JCPSA-1961-34-1617
JCPSA-1962-36-1682
JACSA-1959-81-6405 (quantum yield)
JCPSA-1937-5-807 (mechanism)
JCPSA-1968-49-4769 (quantum yield)
JCPSA-1954-22-1680 (quantum yield and
mechanism)
JCPSA-1954-22-1685 (quantum yield and
mechanism)



Bates and Witherspoon
Castellion and Noyes
Cvetanovic, R. J.
Greenberg and Heicklen
Hampson and Okabe
Noyes, W. A., Jr.
Warneck, P.
Yamazaki, H.
Yamazaki and Cvetanovic
Yamazaki and Cvetanovic
Yamazaki and Cvetanovic

MNRAA-1952-112-101 (calculation)
JACSA-1957-79-290 (quantum yield)
JCPSA-1965-43-1850 (mechanism)
IJCKB-1970-2-185 (quantum yield)
JCPSA-1970-52-1930 (quantum yield)
JCPSA-1937-5-807 (mechanism)
JCPSA-1965-43-1849 (quantum yield)
CJCHA-1970-48-3269 (mechanism)
JCPSA-1963-39-1902 (mechanism)
JCPSA-1964-40-582 (mechanism)
JCPSA-1964-41-3703 (mechanism)



Young, et al.

JCPSA-1968-49-4769 (1D , or 1S)
(quantum yield)

Young, et al.

JCPSA-1969-50-309 (1S)



Young, et al.

JCPSA-1968-49-4769 ($A {}^3\Sigma_u^+$)
(quantum yield)



Pease, R. N.

JCPSA-1939-7-749 (review)

Tunder, et al.

*ASTSZ-1967-RPT/TR1001(9210-02)-1

Wourtzel, M. E.

RADMA-1919-11-332

Zelikoff and Aschenbrand

JCPSA-1954-22-1685 (mechanism)



Campbell and Thrush
Young, et al.

TFSGA-1966-62-3366
JCPSA-1969-50-303



Briner, et al.

JCPQA-1926-23-609

Kueck and Brewer

JPCHA-1932-36-2395

Lewis and Hinshelwood

PRLAA-1938-168-441

Stewardson, E. A.

TFSGA-1934-30-1018



Barton and Dove

CJCHA-1969-47-521

Baulknight, C.

*GQRZZ-1965-RPT-RM-274 (evaluation)

Bell, et al.

JCSOA-1957-1474

Benson and O'Neal

NSRDA-1970-NBS 21-553 (review)

Borisov, A. A.

KICAA-1968-9-399

Bradley and Kistiakowsky

JCPSA-1961-35-256

Drummond and Hiscock

AJCHA-1967-20-815

Fine, B. D.

NASCA-1962-TN/D-1528 (evaluation)

Fishburne and Edse

JCPSA-1964-41-1297

Fishburne and Edse

JCPSA-1966-44-515

Fishburne, et al.

*OSC&U-1962-Ohio State Univ.

Fishburne, et al.

*OSC&U-1965-Ohio State Univ.

Gill and Laidler

PFLDA-1964-7-1391

Graven, W. M.

CJCHA-1958-36-1570 (review)

Gutman, et al.

JACSA-1959-81-6190 (mechanism)

Hunter, E.

JPCHA-1966-70-1793

Johnston, H. S.

PRLAA-1934-144-386

Johnston, H. S.

JCPSA-1951-19-663 (evaluation)

Johnston and White

JCPSA-1952-20-1130 (evaluation)

Jost, W.

JCPSA-1954-22-1969 (evaluation)

Jost, et al.

WZTUA-1967-16-1367

Jost, et al.

*GOTTU-1963-Göttingen Univ.

Kassel, L. S.

ZENAA-1964-19-59

Kaufman, et al.

ACM&A-1952-57-227

Lindars and Hinshelwood

JCPSA-1956-25-106

Lindars and Hinshelwood

PRLAA-1955-231-162

Martinengo, et al.

PRLAA-1955-231-178

Modica, A. P.

ZPCFA-1966-51-104

Musgrave and Hinshelwood

JPCHA-1965-69-2111

Olschewski, et al.

PRLAA-1932-135-23

Olschewski, et al.

BBPCA-1966-70-450

NACGA-1965-115

$N_2\Theta + M \rightarrow N_2 + \Theta + M$ (Continued)

Graevskii, A. N.	JTPLA-1965-48-1150
Pease, R. N.	JCPSA-1939-7-749 (review)
Powell, R. E.	JCPSA-1959-30-724 (review)
Preston and Cvetanovic	*CCKNZ-1971-4-Preprint (review and mechanism)
Schumacher, H. J.	BGOKA-1938-131 (review)
Troe and Wagner	BBPCA-1967-71-937 (review)
Wieder and Marcus	JCPSA-1962-37-1835
Wourtzel, M. E.	RADMA-1919-11-332

 $N_2\Theta + M^* \rightarrow N_2 + \Theta + M$

Campbell and Thrush	TFSOA-1966-62-3366
Campbell and Thrush	TFSOA-1968-64-1275
Young, et al.	JCPSA-1969-50-303
Zabolotny and Gesser	JCPSA-1962-36-565

 $N_2\Theta + M \rightarrow N_2 + 1/2\Theta_2 + M$ (overall)

Bonnefois and Destriau	BSCFA-1970-2113
Briner, et al.	JCPQA-1926-23-609 (mechanism)
Graven, W. M.	JACSA-1959-81-6190
Hibben, J. H.	PNASA-1927-13-626
Hibben, J. H.	JACSA-1928-50-937
Hibben, J. H.	JACSA-1928-50-940
Hinshelwood, C. N.	ZPCBA-1930-10-157 (review)
Hinshelwood and Burk	PRLAA-1924-106-284
Hunter, E.	PRLAA-1934-144-386
Hunter, M. A.	ZEPCA-1905-53-441
Hutchison and Hinshelwood	PRLAA-1928-117-131
Joshi, S. S.	TFSOA-1927-23-227
Joshi, S. S.	TFSOA-1929-25-108
Joshi, S. S.	TFSOA-1929-25-118
Joshi, S. S.	TFSOA-1929-25-137
Kassel, L. S.	ACM&A-1932-57-227 (review)
Kueck and Brewer	JPCHA-1932-36-2395
Lewis and Hinshelwood	PRLAA-1938-168-441
Musgrave and Hinshelwood	PRLAA-1932-135-23
Nagasako and Volmer	ZPCBA-1930-10-414
Nagasako, N.	ZPCFA-1931-11-420 (review)
Ramsperger and Waddington	PNASA-1931-17-103
Schumacher, H. J.	BGOKA-1938-131 (review)
Stewardson, E. A.	NATUA-1933-131-364
Stewardson, E. A.	TFSOA-1934-30-1018
Volmer and Bogdan	ZPCBA-1933-21-257
Volmer and Briske	ZPCBA-1934-25-81
Volmer and Froehlich	ZPCBA-1932-19-85
Volmer and Froehlich	ZPCFA-1932-19-89
Volmer and Kummerow	ZPCBA-1930-9-141

 $N_2\Theta + M \rightarrow N_2\Theta^* + M$

Bell, et al.	JCS&A-1957-1474
Fishburne and Edse	JCPSA-1964-41-1297
Friedman and Bigeleisen	JACSA-1953-75-2215 (mechanism)
Gill and Laidler	CJCHA-1958-36-1570 (review)
Johnston, H. S.	JCPSA-1951-19-663 (evaluation)
Johnston, H. S.	JCPSA-1952-20-1103 (evaluation)
Johnston and White	JCPSA-1954-22-1969 (evaluation)
Lindars and Hinshelwood	PRLAA-1955-231-178 (mechanism)
Wieder and Marcus	JCPSA-1962-37-1835 (mechanism)

 $N_2\Theta^* + M \rightarrow N_2\Theta + M$

Bell, et al.	JCS&A-1957-1474
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$N_2\Theta^* + M \rightarrow N_2\Theta + M$ (Continued)

Fishburne and Edse
 Fricke, E. F.
 Friedman and Bigeleisen
 Gill and Laidler
 Johnston, H. S.
 Johnston, H. S.
 Johnston and White
 Kneser, H.
 Knudsen and Fricke
 Kuechler, L.
 Lindars and Hinshelwood

JCPSCA-1964-41-1297
 JASMA-1941-12-245
 JACSA-1953-75-2215 (mechanism)
 CJCHA-1958-36-1570 (review)
 JCPSCA-1951-19-663 (evaluation)
 JCPSCA-1952-20-1103 (evaluation)
 JCPSCA-1954-22-1969 (evaluation)
 ANPYA-1933-16-337 (evaluation)
 Jasma-1941-12-255
 ZPCBA-1938-41-199
 PRLAA-1955-231-178 (mechanism)



Pease, R. N.

JCPSCA-1939-7-749 (mechanism)



Barton and Dove
 Bradley and Kistiakowsky
 Fishburne and Edse
 Graven, W. M.
 Jost, et al.
 Jost, et al.
 Kaufman and Kelso
 Lindars and Hinshelwood
 Mayer, S. W.
 Mayer, S. W.
 Musgrave and Hinshelwood

CJCHA-1969-47-521 (mechanism)
 JCPSCA-1961-35-256
 JCPSCA-1964-41-1297
 JACSA-1959-81-6190 (mechanism)
 *GOTTU-1963-Göttingen Univ. (mechanism)
 ZENAA-1964-19-59
 JCPSCA-1955-23-602
 PRLAA-1955-231-162 (mechanism)
 JPCHA-1967-71-4159 (calculation)
 JPCHA-1969-73-3941 (calculation)
 PRLAA-1932-135-23



Barton and Dove
 Fishburne and Edse
 Jost, et al.
 Jost, et al.
 Kaufman, et al.
 Reuben and Linnett

CJCHA-1969-47-521 (mechanism)
 JCPSCA-1964-41-1297 (mechanism)
 *GOTTU-1963-Göttingen Univ. (mechanism)
 ZENAA-1964-19-59 (mechanism)
 JCPSCA-1956-25-106 (mechanism)
 TFSOA-1959-55-1543 (mechanism)



Tunder, et al.

*ASTSZ-1967-RPT/TR-1001(9210-02)-1



Kretschmer, C. B.

*AJGAZ-1962-RPT/AN-671 (upper limit estimate)



Barton and Dove
 Bell, et al.
 Borisov, A. A.
 Bortner and Kummier
 Bortner and Kummier
 Bradley and Kistiakowsky
 Fine, B. D.
 Fishburne and Edse
 Fishburne and Edse
 Fishburne, et al.
 Friedman and Bigeleisen
 Graven, W. M.
 Gutman, et al.
 Henrici and Bauer
 Henriques, et al.

CJCHA-1969-47-521
 JCSOA-1957-1474 (mechanism)
 KICAA-1968-9-399
 DASRA-1967-RPT/1948 (evaluation)
 *GESLZ-1969-RPT/GE-9500-ECS-SR-1 (review)
 JCPSCA-1961-35-256
 NASCA-1962-TN/D-1528 (estimate)
 JCPSCA-1964-41-1297 (mechanism)
 JCPSCA-1966-44-515
 *OSCOU-1965-Ohio Univ.
 JACSA-1953-75-2215 (mechanism)
 JACSA-1959-81-6190 (mechanism)
 JPCHA-1966-70-1793
 JCPSCA-1969-50-1333
 JCPSCA-1938-6-518

$N_2\Theta + \Theta \rightarrow N_2 + \Theta_2$ (Continued)

Hunter, E.
 Jost, et al.
 Jost, et al.
 Kaufman, et al.
 Kistiakowsky and Volpi
 Lindars and Hinshelwood
 Martinengo, et al.
 Meyer, S. W.
 Meyer, S. W.
 Murad and Noyes
 Olschewski, et al.
 Olschewski, et al.
 Graevskii, A. N.
 Reuben and Linnett
 Verdurmen, E. A. Th.
 Warneck and Sullivan
 Zabolotny and Gesser
 Zelikoff and Aschenbrand

PRLAA-1934-144-386 (mechanism)
 *GOTTU-1963-Göttingen Univ. (mechanism)
 ZENAA-1964-19-59 (mechanism)
 JCPSA-1956-25-106
 JCPSA-1957-27-1141 (upper limit estimate)
 PRLAA-1955-231-162
 ZPCFA-1966-51-104 (mechanism)
 JPCHA-1967-71-4159 (calculation)
 JPCHA-1969-73-3941 (calculation)
 JACSA-1959-81-6405
 NACGA-1965-115 (mechanism)
 BBPCA-1966-70-450 (mechanism)
 SPHJA-1965-21-768 (review)
 TFSΘA-1959-55-1543 (mechanism)
 JPCHA-1966-70-1767 (upper limit estimate)
 BBPCA-1968-72-159
 JCPSA-1962-36-565 (mechanism)
 JCPSA-1954-22-1680 (mechanism)

 $N_2\Theta + \Theta^* \rightarrow N_2 + \Theta_2$

Cvetanovic, R. J.
 Greenberg and Heicklen
 Hampson and Skabe
 Heicklen and Cohen
 Preston and Cvetanovic
 Reuben and Linnett
 Scott and Cvetanovic
 Verdurmen, E. A.
 Warneck, P.
 Warneck and Sullivan
 Yamazaki, H.
 Yamazaki and Cvetanovic
 Yamazaki and Cvetanovic

JCPSA-1965-43-1850 (mechanism)
 IJCKB-1970-2-185 (¹D)
 JCPSA-1970-52-1930
 ADPCA-1968-5-227 (review)
 JCPSA-1966-45-2888 (¹D)
 TFSΘA-1959-55-1543 (mechanism)
 JCPSA-1971-54-1440 (¹D)
 JPCHA-1966-70-1767 (upper limit estimate)
 JCPSA-1965-43-1849 (quantum yield)
 BBPCA-1968-72-159 (¹D)
 CJCHA-1970-48-3269 (¹D)
 JCPSA-1963-39-1902
 JCPSA-1964-40-582

 $N_2\Theta + \Theta \rightarrow NO + NO$

Barton and Dove
 Baulch, et al.
 Bell, et al.
 Borisov, A. A.
 Bortner and Kummler
 Bortner and Kummler
 Bradley and Kistiakowsky
 Fenimore, C. P.
 Fenimore and Jones
 Fenimore and Jones
 Fenimore and Jones
 Fine, D. B.
 Fishburne and Edse
 Fishburne and Edse
 Fishburne, et al.
 Friedman and Bigeleisen
 Graven, W. M.
 Gutman, et al.
 Henrici and Bauer
 Henriques, et al.
 Herron and Schiff
 Jost, et al.
 Jost, et al.
 Kaufman, et al.

CJCHA-1969-47-521
 HTRRA-1969-4-44 (evaluation)
 JCSΘA-1957-1474 (mechanism)
 KICAA-1968-9-399
 DASRA-1967-RPT/1948 (evaluation)
 *GESLZ-1969-RPT/GE-9500-ECS-SR-1 (review)
 JCPSA-1961-35-256
 JCPSA-1961-35-2243
 JPCHA-1958-62-178
 JPCHA-1959-63-1834 (estimate)
 SYMCA-1962-8-127
 NASCA-1962-TN/D-1528 (estimate)
 JCPSA-1964-41-1297 (mechanism)
 JCPSA-1966-44-515
 *OSCOU-1965-Ohio Univ.
 JACSA-1953-75-2215 (mechanism)
 JACSA-1959-81-6190 (mechanism)
 JPCHA-1966-70-1793
 JCPSA-1969-50-1333
 JCPSA-1938-6-518
 CJCHA-1958-36-1159
 *GOTTU-1963-Göttingen Univ. (mechanism)
 ZENAA-1964-19-59 (mechanism)
 JCPSA-1956-25-106



Kaufman, F.
 Kistiakowsky and Volpi
 Lewis and Hinshelwood
 Lindars and Hinshelwood
 Mayer, S. W.
 Mayer, S. W.
 Martinengo, et al.
 Murad and Noyes
 Musgrave and Hinshelwood
 Noyes, W. A., Jr.
 Olszewski, et al.
 Olszewski, et al.
 Reuben and Linnert
 Schofield, K.
 Warneck and Sullivan
 Zelikoff and Aschenbrand

PRKNA-1961-1-1 (review)
 JCPSA-1957-27-1141 (upper limit estimate)
 PRLAA-1938-168-441 (mechanism)
 PRLAA-1955-231-162 (mechanism)
 JPCHA-1967-71-4159 (calculation)
 JPCHA-1969-73-3941 (calculation)
 ZPCFA-1966-51-104 (mechanism)
 JACSA-1959-81-6405
 PRLAA-1932-135-23 (mechanism)
 JCPSA-1937-5-807 (mechanism)
 NACGA-1965-115 (mechanism)
 BBPCA-1966-70-450 (mechanism)
 TFSOA-1959-55-1543 (mechanism)
 PLSSA-1967-15-643
 BBPCA-1968-72-159
 JCPSA-1954-22-1680 (mechanism)



DeMore, W. B.
 Donovan, et al.
 Greenberg and Heicklen
 Hampson and Okabe
 Heicklen and Cohen
 Graevskii, A. N.
 Preston and Cvetanovic
 Reuben and Linnert
 Scott and Cvetanovic
 Warneck and Sullivan
 Yamazaki, H.
 Yamazaki and Cvetanovic
 Yamazaki and Cvetanovic

JCPSA-1970-52-4309 (¹D)
 CHPLB-1970-6-488 (¹D)
 IJCKB-1970-2-185 (¹D)
 JCPSA-1970-52-1930
 ADPCA-1968-5-227 (review)
 SPHJA-1965-21-768 (review)
 JCPSA-1966-45-2888 (¹D)
 TFSOA-1959-55-1543 (mechanism)
 JCPSA-1971-54-1440 (¹D)
 BBPCA-1968-72-159 (¹D)
 CJCHA-1970-48-3269 (¹D)
 JCPSA-1963-39-1902 (rel. rate see:
 $N_2\Theta + \Theta^* \rightarrow N_2 + \Theta_2$)
 JCPSA-1964-40-582



Black, et al.

JCPSA-1969-51-116 [$\Theta^*(^1S)$; $N\Theta^*(B^2\Pi_r)$]



Jaffe and Klein

TFSOA-1966-62-3135



Jaffe and Klein

TFSOA-1966-62-3135



Black, et al.
 Stuhl and Welge
 Young, et al.
 Young, et al.
 Young, et al.

CJCHA-1969-47-1872 (¹S)
 CJCHA-1969-47-1870 (¹S)
 JCPSA-1968-49-4758 (¹D)
 JCPSA-1968-49-4769 (¹D, or ¹S)
 JCPSA-1969-50-309 (¹S)



Fishburne, et al.
Jaffe and Klein

*OSCOU-1965-Ohio State Univ.
TFSOA-1966-62-3135



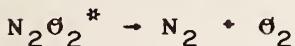
Bortner and Kummeler

*GESLZ-1969-RPT/GE-9500-ECS-SR-1 (review)



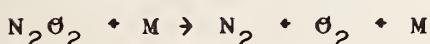
Tunder, et al.

*ASTSZ-1967-RPT/TR-1001(9210-02)-1



Strausz and Gunning

CJCHA-1961-39-2549



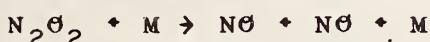
Fishburne, et al.

*OSCOU-1965-Ohio State Univ. (mechanism)



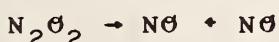
Fishburne, et al.

*OSCOU-1965-Ohio State Univ. (mechanism)



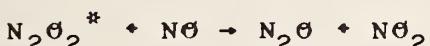
Fishburne, et al.

*OSCOU-1965-Ohio State Univ. (mechanism)



Guggenheim, E. A.
Rice, O. K.

MOPHA-1966-10-401 (evaluation)
JCPSA-1936-4-53 (mechanism)



Strausz and Gunning

CJCHA-1961-39-2549



Guggenheim, E. A.

MOPHA-1966-10-401 (evaluation)



Bodenstein, M.
Rice, O. K.
Sole, M.
Stoddart, E. M.
Trautz and Schlueter

HCACA-1935-18-743 (mechanism)
JCPSA-1936-4-53 (mechanism)
CCCCA-1964-29-2227 (mechanism)
JCSOA-1939-5 (mechanism)
ZAAACA-1924-136-1 (mechanism)



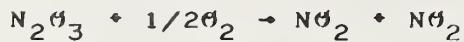
Bauer, et al.
Bodenstein, M.
Klein, et al.
Leifer, E.
Schumacher, H. J.
Schumacher and Sprenger
Sprenger, G.
Wayne and Yost

ACUSA-1959-9-181
ZEPCA-1923-104-51 (mechanism)
JCPQA-1963-60-148
JCPSA-1940-8-301 (mechanism)
BOOKA-1938-139 (review)
ZEPCA-1928-136-77 (mechanism)
ZEPCA-1928-136-49 (mechanism)
JCPSA-1951-19-41



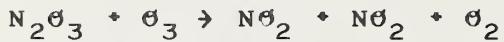
Schumacher, H. J.
Schumacher, H. J.
Schumacher and Sprenger
Sprenger, G.

BÖOKA-1938-139 (review)
BÖOKA-1938-419 (review)
ZEPCA-1928-136-77 (mechanism)
ZEPCA-1928-136-49 (mechanism)



Rasching, F.
Sanfourche, A.
Sanfourche, A.

ZACHA-1905-18-1281
BSCFA-1919-25-633
CÖREA-1919-168-307



Schumacher, H. J.

BÖOKA-1938-419 (mechanism)



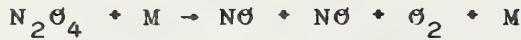
Wieder and Marcus

JCPSA-1962-37-1835 (evaluation)



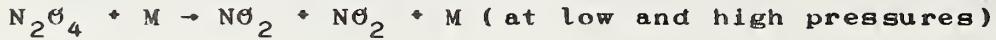
Holmes and Daniels

JACSA-1934-56-630 (quantum yield)



Tipper and Williams
Treacy and Daniels

TFSΘA-1961-57-79 (mechanism)
JACSA-1955-77-2033 (mechanism)



Bauer, S.
Bauer and Gustavson
Bauer, et al;
Benson and Θ'Neal
Blend, H.
Brass and Tolman
Brokaw, R. S.

JPCHA-1953-57-424
DFSGA-1954-17-69
ACUSA-1959-9-181
NSRDS-1970-NBS 21-554 (evaluation)
JASMA-1962-34-129
JACSA-1932-54-1003
JCPSA-1961-35-1569 (upper limit estimate)

Carrington and Davidson
Carrington and Davidson
Cher, M.
Grüneisen and Goens
Kistiakowsky and Richards
Kneser and Guler
Olson and Teeter
Preston and Cvetanovic

JCPSA-1951-19-1313
JPCHA-1953-57-418
JCPSA-1962-37-2564
ANPYA-1923-72-193
JACSA-1930-52-4661
PHZFA-1936-37-677 (review)
NATUA-1929-124-444
*CCKNZ-1971-4-Preprint (review and mechanism)

Richards and Reid
Richards and Reid
Schumacher, H. J.
Selle, H.
Sessler, G.
Sessler, G.
Teeter, C. E., Jr.
Verhoek and Daniels
Wegener, P. P.
Wegener, P. P.
Wegener, P. P.
Wieder and Marcus
Zimet, E.

JCPSA-1933-1-114
JCPSA-1933-1-737 (review)
BÖOKA-1938-147 (review)
ZEPCA-1923-104-1
ACUSA-1959-9-119
ACUSA-1960-10-44
JCPSA-1933-1-251 (review)
JACSA-1931-53-1186
JCPSA-1958-28-724
PFLDA-1959-2-264
JARSA-1960-30-322
JCPSA-1962-37-1835 (evaluation)
JCPSA-1970-53-515

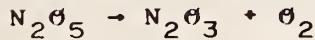


Golomb and Good

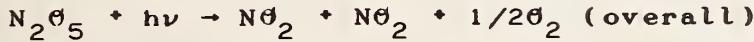
JCPSA-1968-49-4176



Bodenstein, M.
Busse and Daniels



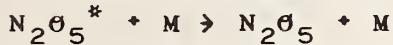
Bodenstein, M.
Kassel, L. S.
Schumacher, H. J.
Schumacher, H. J.
Schumacher and Sprenger
Schumacher and Sprenger
Sprenger, G.



Holmes and Daniels
Preston and Cvetanovic



Johnston, H. S.
Johnston, H. S.
Johnston and White
Wieder and Marcus



Johnston, H. S.
Johnston, H. S.
Johnston and White
Wieder and Marcus



Amell and Daniels
Benson, S. W.
Benson and O'Neal
Cowan, et al.
Ford and Endow
Ford, et al.
Hisatsune, et al.
Johnston, H. S.
Johnston and Perrine
Johnston and White
Lowry and Seddon
Mills and Johnston
Ogg, R. A., Jr.
Ogg, R. A., Jr.
Ogg, R. A., Jr.
Ogg, R. A., Jr.
Ogg, et al.
Powell, R. E.
Schott and Davidson
Schumacher, H. J.
Schumacher and Sprenger
Schumacher and Sprenger
Schumacher and Sprenger
Smith and Daniels
Sprenger, G.
Wieder and Marcus

ZEPCA-1923-104-51 (mechanism)
JACSA-1927-49-1257 (mechanism)

ZEPCA-1923-104-51 (mechanism)
ACM&A-1932-57-189
B&OKA-1938-139 (review)
B&OKA-1938-419 (review)
ZACHA-1929-42-697 (mechanism)
ZPCBA-1929-2-267 (mechanism)
ZEPCA-1928-136-49 (mechanism)

JACSA-1934-56-630 (quantum yield)
*CCKNZ-1971-4-Preprint (review and mechanism)

JCPSA-1952-20-1103 (evaluation)
B&OKA-1966-14 (evaluation)
JCPSA-1954-22-1969 (evaluation)
JCPSA-1962-37-1835 (mechanism)

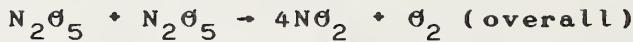
JCPSA-1952-20-1103 (evaluation)
B&OKA-1966-14 (evaluation)
JCPSA-1954-22-1969 (evaluation)
JCPSA-1962-37-1835 (mechanism)

JACSA-1952-74-6209 (estimate)
B&OKA-1960-408 (review)
NSRDA-1970-NBS 21-555 (evaluation)
JCPSA-1953-21-1397
JCPSA-1957-27-1156 (mechanism)
JCPSA-1960-32-1256
JACSA-1957-79-4648
B&OKA-1966-14 (review)
B&OKA-1966-299 (review)
JACSA-1951-73-4542
JACSA-1953-75-1567
JCPSA-1952-20-1103 (evaluation)
JACSA-1951-73-4782
JCPSA-1954-22-1969 (evaluation)
JCS&A-1938-626 (mechanism)
JACSA-1951-73-938
JCPSA-1947-15-337 (mechanism)
JCPSA-1947-15-613 (mechanism)
JCPSA-1950-18-572 (estimate)
JCPSA-1953-21-2079 (mechanism)
JCPSA-1950-18-573 (estimate)
JCPSA-1959-30-724 (review)
JACSA-1958-80-1841
ZEELA-1941-47-673 (review)
ZACHA-1929-42-697 (review)
ZEPCA-1929-140-281 (mechanism)
ZPCBA-1929-2-267 (mechanism)
JACSA-1947-69-1735 (mechanism)
ZEELA-1931-37-674 (mechanism)
JCPSA-1962-37-1835



Johnston, H. S.
 Johnston, H. S.
 Johnston and White
 Wieder and Marcus

JCPSA-1952-20-1103 (evaluation)
 B66KA-1966-14 (evaluation)
 JCPSA-1954-22-1969 (evaluation)
 JCPSA-1962-37-1835 (evaluation)



Bodenstein, M.
 Busse and Daniels
 Daniels and Johnston
 Daniels, et al.
 Hibben, J. H.
 Hibben, J. H.
 Hibben, J. H.
 Hirst, H. S.
 Hirst and Rideal
 Hodges and Linhorst
 Hunt and Daniels
 Johnston, H. S.
 Johnston, H. S.
 Johnston and Tao
 Kassel, L. S.
 Linhorst and Hodges
 Loomis and Smith
 Mills and Johnston
 Moelwyn-Hughes, E. A.
 Moelwyn-Hughes, E. A.
 Moelwyn-Hughes, E. A.
 Preston and Cvetanovic

ZEPCA-1923-104-51 (mechanism)
 JACSA-1927-49-1257
 JACSA-1921-43-53
 JACSA-1922-44-2402
 PNASA-1927-13-626
 JACSA-1928-50-940
 JCPSA-1930-34-1387
 JCSOA-1925-127-657
 PRLAA-1925-109-526
 PNASA-1931-17-28
 JACSA-1925-47-1602
 B66KA-1966-14 (review)
 B66KA-1966-299 (review)
 JACSA-1951-73-2948
 ACMOA-1932-57-182 (review)
 JACSA-1934-56-836
 JACSA-1928-50-1864
 JACSA-1951-73-938
 B66KA-1957-1086 (review)
 B66KA-1957-1107 (review)
 B66KA-1957-1115 (review)
 *CCKNZ-1971-4-Preprint (review and mechanism)

Ramsperger and Tolman
 Ramsperger, et al.
 Rice and Getz
 Schumacher, H. J.
 Schumacher, H. J.
 Schumacher and Sprenger
 Schumacher and Sprenger
 Schumacher and Sprenger
 Schumacher and Sprenger
 Sprenger, G.
 White and Tolman

PNASA-1930-16-6
 PNASA-1929-15-453
 JPCHA-1927-31-1572
 B66KA-1938-139 (review)
 B66KA-1938-419 (review)
 ZACHA-1929-42-697 (mechanism)
 ZEPCA-1929-140-281
 ZPCBA-1929-2-267
 PNASA-1930-16-129
 ZEPCA-1928-136-49
 JACSA-1925-47-1240



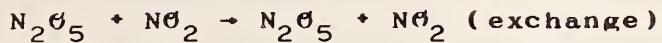
Amell and Daniels
 Baxter and Dickinson
 Busse and Daniels
 Jach, J.
 Johnston, H. S.
 Johnston, H. S.
 Johnston, H. S.
 Johnston and Perrine
 Kassel, L. S.
 Mills and Johnston
 Norrish, R. G. W.
 Ogg, R. A., Jr.
 Ogg, R. A., Jr.
 Ogg, et al.
 Powell, R. E.
 Schumacher, H. J.
 Schumacher and Sprenger
 Smith and Daniels
 Sprenger, G.
 Wilson and Johnston
 Zabolotskii, T. V.
 Zabolotskii and Solnyshkova

JACSA-1952-74-6209 (estimate)
 JACSA-1929-51-109
 JACSA-1927-49-1257
 TFSOA-1957-53-41
 B66KA-1966-14 (review)
 B66KA-1966-299 (review)
 JACSA-1953-75-1567
 JACSA-1951-73-4782
 ACMOA-1932-57-190 (review)
 JACSA-1951-73-938
 JCSOA-1927-761 (mechanism)
 JCPSA-1947-15-337 (mechanism)
 JCPSA-1947-15-613 (mechanism)
 JCPSA-1950-18-573 (mechanism)
 JCPSA-1959-30-724
 B66KA-1938-139 (review)
 ZEPCA-1928-136-77 (mechanism)
 JACSA-1947-69-1735
 ZEPCA-1928-136-49 (mechanism)
 JACSA-1953-75-5763
 JGCHA-1950-20-1441 (mechanism)
 JGCHA-1950-20-1445 (mechanism)



Blacet, et al.

JACSA-1962-84-4011

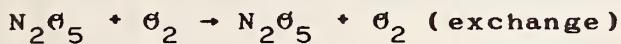


Amell and Daniels
Ogg, R. A., Jr.
Ogg, et al.

JACSA-1952-74-6209
JCPSCA-1947-15-613 (estimate)
JCPSCA-1950-18-573 (mechanism)



Schumacher and Sprenger ZEPCA-1928-136-77 (mechanism)



Ogg, R. A., Jr.

JCPSCA-1953-21-2079



Kassel, L. S.
Lowry and Seddon

ACMGA-1932-249 (review)
JCSGA-1938-626 (rate and mechanism)

Nordberg, M. E.
Preston and Cvetanovic

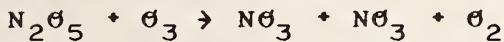
SCIEA-1929-70-580
*CCKNZ-1971-4-Preprint (review and mechanism)

Schumacher and Sprenger

ZEPCA-1928-136-77 (rate and mechanism)

White and Tolman

JACSA-1925-47-1240



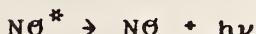
Schumacher and Sprenger

ZEPCA-1928-136-77 (mechanism)



Callear and Smith

DFSGA-1964-37-96



Basco, et al.
Basco, et al.

PRLAA-1961-260-459
PRLAA-1962-269-180 (mechanism)

Black, et al.

JCPSCA-1969-51-116 ($B^2\Pi_r$)

Bubert and Froben

CHPLB-1971-8-242

Callear and Smith

TFSGA-1963-59-1720

Callear and Smith

TFSGA-1963-59-1735 (mechanism)

Callear and Smith

DFSGA-1964-37-96

Callear and Smith

TFSGA-1965-61-2383 (mechanism)

Fink and Welge

ZENAA-1968-23-358

Jeunehomme, M.

JCPSCA-1966-45-4433

Jeunehomme and Duncan

JCPSCA-1964-41-1692

Keck, et al.

APNYA-1959-7-1

Kleinberg and Terenin

DANKA-1955-101-445 (mechanism)

Kleinberg and Terenin

DANKA-1955-101-1031 (mechanism)

Nicholls, et al.

CBFMA-1959-3-13 (review)

Nicholls, et al.

ASJGA-1960-131-99

Tanaka, Y.

JCPSCA-1954-22-2045 (mechanism)

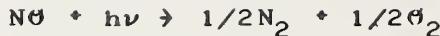


Leiga and Taylor

JCPSCA-1965-42-2107 (quantum yield and mechanism)

Preston and Cvetanovic

*CCKNZ-1971-4-Preprint (review and mechanism)



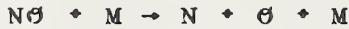
Flory and Johnston
Kondratiev, V. N.
MacDonald J. Y.

JACSA-1935-57-2641
ACPYA-1935-3-247
JCSQA-1928-1 (quantum yield
and mechanism)



MacDonald, J. Y.

JCSQA-1928-1 (quantum yield and
mechanism)



Baulch, et al.
Bortner, M. H.
Desai, S. V.
Freedman and Daiber
Kaufman and Kelso
Peng and Pindroh
Pratt, N. H.
Preston and Cvetanovic

Stezhenskii, A. I.
Troe and Wagner
Tunder, et al.
Vinokourov, et al.
Wray, K. L.
Wray and Teare
Wray, et al.
Young and Sharpless
Young, et al.

HTRRA-1969-4-31 (evaluation)
NBTNA-1969-TN-484 (evaluation)
PHDTA-1969-Calif. Inst. of Tech.
JCPSA-1961-34-1271
JCPSA-1957-27-1209
BBSDA-1963-RPT/D2-13422 (review)
NGTRA-1963-Pratt (review)
*CCKNZ-1971-4-Preprint (review and
mechanism)
TEKHA-1968-4-698
BBPCA-1967-71-937 (review)
*ASTSZ-1967-RPT/TR-1001(9210-02)-1
*FGRPZ-1969-101
PGARA-1962-7-181 (review)
JCPSA-1962-36-2582
SYMCA-1962-8-328 (review)
JCPSA-1963-39-1071
JCPSA-1964-41-1497



Daiber and Williams

JQSRA-1961-1-135



Bates, J. R.
Becker and Bayes
Callear and Smith
Callear and Smith
Callear and Smith
Callear and Wood
Dugan, C. H.
Fallon, et al.
Noyes, W. A., Jr.
Robinson and Nicholls
Welge, K. H.
Young and St. John
Young, et al.

JACSA-1932-54-569
JPCHA-1967-71-371
TFSOA-1963-59-1735
DFSOA-1964-37-96
TFSOA-1965-61-2383 (mechanism)
CHPLB-1970-5-128
JCPSA-1966-45-87 (evaluation)
JPCHA-1959-63-2082 (mechanism)
JACSA-1931-53-514
PPSOA-1958-71-957
JCPSA-1966-45-166 (mechanism)
JCPSA-1968-48-898
JCPSA-1968-49-4769 [NO^*(² Π_r)
M^* = N₂^{*}(¹ Δ_u^+)]



Basco, et al.
Basco, et al.
Broida and Carrington
Callear and Smith
Callear and Smith
Jarmain, et al.
Jarmain, et al.
Kleinberg and Terenin
Kleinberg and Terenin

PRLAA-1961-260-459
PRLAA-1962-269-180 (mechanism)
JCPSA-1963-38-136 (mechanism)
TFSOA-1963-59-1720
DFSOA-1964-37-96
ASJOA-1953-118-228
ASJOA-1955-122-55
DANKA-1955-101-445
DANKA-1955-101-1031

$\text{NO}^* + \text{M} \rightarrow \text{NO} + \text{M}$ (electronic) (Continued)

Weber and Penner
Young and Sharpless JCPSA-1957-26-860
DFSQA-1962-33-228

$\text{NO}^* + \text{M} \rightarrow \text{NO} + \text{M}$ (vibrational relaxation)

Kamimoto and Matsui JCPSA-1970-53-3987
Monson, et al. PLSSA-1961-3-86
Robben, F. JCPSA-1959-31-420
Robben, et al. JCPSA-1961-33-630
Slobodskaya and Tkachenko OPSUA-1970-29-138

$\text{NO}^* + \text{M} \rightarrow \text{NO} + \text{M}^*$ (energy transfer)

Basco, et al. PRLAA-1962-269-180 (mechanism)
Callear and Smith NATUA-1962-196-888
Callear and Smith TFSQA-1963-59-1735
Callear and Smith DFSQA-1964-37-96
Callear and Smith TFSQA-1965-61-2383 (estimation)

$\text{NO} + \text{NO} \rightarrow \text{N} + \text{NO}_2$

Baulch, et al. HTRRA-1969-4-61 (estimate)
Tunder, et al. *ASTSZ-1967-RPT/TR-1001(9210-02)-1
Vetter, K. ZEELA-1949-53-369

$\text{NO} + \text{NO} \rightarrow \text{N}_2 + \text{NO}_2 + \text{O}_2$ (overall)

Ivanov, V. N. BUPSA-1963-27-40

$\text{NO} + \text{NO} \rightarrow \text{N}_2 + \text{O}_2$ (overall)

Baulch, et al. HTRRA-1969-4-40 (evaluation)
Bes, et al. JCPQA-1970-67-731
Briner and Boubnoff JCPQA-1913-11-597
Davidson, N. *AVEVZ-1958-RPT/32 (review)
Freedman and Daiber JCPSA-1961-34-1271
Gilbert and Daniels IECHA-1948-40-1719 (review)
Glick, et al. JCPSA-1957-27-850
Glick, et al. SYMCA-1955-5-393
Greig and Hall TFSQA-1966-62-652
Heicklen, J. JPCHA-1966-70-2456
Hirschfelder, et al. JPCHA-1953-57-403
Jellinek, K. ZACMA-1906-49-229
Kaufman and Decker SYMCA-1959-7-57
Kaufman and Kelso JCPSA-1953-21-751 (reevaluation)
Kaufman and Kelso JCPSA-1955-23-1702
Lacoste, et al. JCPQA-1970-67-636
Peng and Pindroh BBSDA-1963-RPT/D2-13422 (review)
Preston and Cvetanovic *CCKNZ-1971-4-Preprint (review and
mechanism)

Rice, G. K. JCPSA-1936-4-53 (mechanism)
Rozlovskii, A. I. ZFKHA-1956-30-1349
Trautz, M. ZEPCA-1909-68-295 (review)
Trautz, M. ZAAC-1916-96-1 (review)
Vetter, K. ZEELA-1949-53-369 (rate and
mechanism)

Vetter, K. ZEELA-1949-53-376 (rate and
mechanism)

Wecker and Bauer PYDYA-1966-4-57
Wise and Frech JCPSA-1952-20-22
Wray and Teare JCPSA-1962-36-2582
Yuan, et al. JPCHA-1959-63-952
Zeldovich, J. ACPYA-1946-21-577 (rate and
mechanism)



Briner and Boubnoff

JCPQA-1913-11-597 (overall)



Baulch, et al.

HTRRA-1969-4-51 (evaluation)

Camac and Feinberg

SYMCA-1967-11-137 (mechanism)

Heicklen, J.

JPCHA-1966-70-2456

Kaufman and Kelso

SYMCA-1959-7-53

Kaufman and Kelso

JCPSA-1955-23-1702

Kaufman and Kelso

JCPSA-1953-21-751

Rozlovskii, A. I.

ZFKHA-1956-30-1349

Tunder, et al.

*ASTSZ-1967-RPT/TR-1001(9210-02)-1

Vetter, K.

ZEELA-1949-53-369

Wise and Frech

JCPSA-1952-20-1724

Wise and Frech

JCPSA-1953-21-752 (review)



Klein, et al.

JCPQA-1963-60-148

Spindel and Stern

JCPSA-1960-32-1579 (estimate)



McGee and Heicklen

JCPSA-1964-41-2974 (estimate)

Wright and Winkler

JPCHA-1962-66-1747



Bodenstein, M.

HCACA-1935-18-793 (mechanism)

Golomb and Good

JCPSA-1970-52-1595

Rice, G. K.

JCPSA-1936-4-53 (mechanism)

Solc, M.

CCCCA-1964-29-2227 (mechanism)

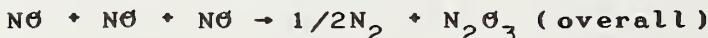
Trautz and Schlueter

ZAACA-1924-136-1 (mechanism)



Strausz and Gunning

CJCHA-1961-39-2549 (mechanism)



Briner and Boubnoff

JCPQA-1913-11-597

McGilveray and Winkler

CJCHA-1952-30-194 (rate and mechanism)



JPCHA-1967-71-558

Cohen and Heicklen



Briner and Fridðri

HCACA-1918-1-181

Briner and Fridðri

JCPQA-1918-16-279

Jolibois and Sanfourche

COREA-1919-168-235 (estimate)

Rasching, F.

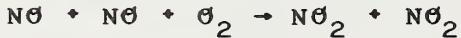
ZACHA-1905-18-1281 (mechanism)

Sanfourche, A.

BSCFA-1919-25-633

Sanfourche, A.

COREA-1919-168-307



Altshuler, et al.

SCIEA-1962-138-442

Ashmore and Tyler

JCTLA-1962-1-39

Ashmore, et al.

TFSOA-1962-58-685

Baulch, et al.

HTRRA-1970-5-36 (evaluation)

$\text{NO} + \text{NO} + \text{O}_2 \rightarrow \text{NO}_2 + \text{NO}_2$ (Continued)

Bodenstein, M.	ZACHA-1909-22-1153
Bodenstein, M. (Meinecke)	ZEELA-1910-16-876
Bodenstein, M.	ZACHA-1918-31-145
Bodenstein, M. (Wachenheim)	ZEELA-1918-24-183
Bodenstein, M. (Linder)	ZEPCA-1922-100-87
Bodenstein, M.	ZEPCA-1923-104-51 (mechanism)
Bodenstein, M.	HCACA-1935-18-743 (rate and mechanism)
Bortner and Kummier	*GESLZ-1969-RPT/GE-9500-ECS-SR-1 (review)
Briner and Fridri	HCACA-1918-1-181
Briner and Fridri	JCPQA-1918-16-279
Briner and Malet	JCPQA-1923-20-173
Briner, et al.	JCPQA-1921-19-290
Briner, et al.	JCPQA-1924-21-25
Brown and Crist	JCPSA-1941-9-840
Bufalini and Stephens	IAPWA-1965-9-123
Burdick, C. L.	JACSA-1922-44-244
Calhoun and Crist	JCPSA-1937-5-301
Crist and Calhoun	JCPSA-1936-4-696
Crist and Roehling	JACSA-1935-57-2196
Foerster and Blich	ZACHA-1910-23-2017 (rate and mechanism)
Gershinowitz and Eyring	JACSA-1935-57-985
Gilbert and Thomas	TFSOA-1963-59-1600 (estimate)
Glasson and Tuesday	JACSA-1963-85-2901
Greig and Hall	TFSOA-1966-62-652
Greig and Hall	TFSOA-1967-63-655
Guggenheim, E. A.	MØPHA-1966-10-401 (review)
Hall and Greig	CCOMA-1966-326
Hasche, R. L.	JACSA-1926-48-2253
Hasche and Patrick	JACSA-1925-47-1207
Heicklen and Cohen	ADPCA-1968-5-203 (review)
Hisatsune and Zafonte	JPCHA-1969-73-2980
Ivanov, V. N.	BUPSA-1963-27-40
Johnston and Slentz	JACSA-1951-73-2948
Jolibois and Sanfourche	CØREA-1919-168-235 (estimate)
Kassel, L. S.	JPCHA-1930-34-1777 (review)
Kassel, L. S.	ACMØA-1932-57-165 (evaluation)
Kornfeld and Klingler	ZPCBA-1929-4-37
Koslewa, D.	BERGA-1960-12-423
Lunge and Berl	ZACHA-1906-19-857
Lunge and Berl	ZACHA-1907-20-1713
Matthes, F.	PHDTA-1933-Berlin
Moelwyn-Hughes, E. A.	BØØKA-1957-1125 (review)
Morecroft and Thomas	JPCHA-1967-71-1543
Morrison, et al.	IECFA-1966-5-175
Norrish, R. G. W.	JCSØA-1927-761 (mechanism)
Norrish, R. G. W.	JCSØA-1929-1158 (mechanism)
Rasching, F.,	ZACHA-1905-18-1281 (mechanism)
Rice, O. K.	JCPSA-1936-4-53 (review)
Sanfourche, A.	BSCFA-1919-25-633 (rate and mechanism)
Sanfourche, A.	CØREA-1919-168-307 (mechanism)
Schumacher, H. J.	BØØKA-1938-311 (review)
Smith, J. H.	JACSA-1943-65-74
Solc, M.	CCCCA-1964-29-2227 (mechanism)
Solc, M.	CCCCA-1965-30-257
Solc, M.	CCCCA-1965-30-3798 (review)
Solc, M.	CCCCA-1966-31-489 (rates and mechanism)
Solc, M.	CHLSA-1963-57-673 (review: mechanism)
Solc, M.	NATUA-1966-209-706
Stoddart, E. M.	JCSØA-1939-5 (mechanism)
Tipper and Williams	TFSØA-1961-57-79 (rate and mechanism)
Trautz, M.	ZAACCA-1916-96-1 (review)
Trautz, M.	ZEELA-1919-25-4

$\text{NO} + \text{NO} + \text{O}_2 \rightarrow \text{NO}_2 + \text{NO}_2$ (Continued)

Trautz, M.	ZEPCA-1911-76-129
Trautz and Schlueter	ZAACA-1924-136-1
Treacy and Daniels	JACSA-1955-77-2033 (rate and mechanism)
Wourtzel, E.	COREA-1920-170-229
Zabolotskii, T. V.	JGCHA-1950-20-1449 (mechanism)
Zabolotskii, T. V.	JGCHA-1950-20-1451
Zabolotskii, T. V.	KHNPA-1956-1-680



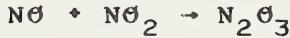
Zabolotskii, T. V. JGCHA-1950-20-1441 (mechanism)



Klein, et al.	JCPQA-1963-60-148
Leifer, E.	JCPSA-1940-8-301 (lower limit estimate)



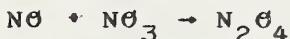
Kistiakowsky and Kydd
Rice and Wunderlich JACSA-1957-79-4825 (mechanism)
JPCHA-1965-69-2137 (mechanism)



Heicklen and Cohen	ADPCA-1968-5-195 (review)
Klein, et al.	JCPQA-1963-60-148
Leifer, E.	JCPSA-1940-8-301 (mechanism)
Schumacher, H. J.	BØKA-1938-139 (review)
Schumacher and Sprenger	ZEPCA-1928-136-77 (mechanism)



Ashmore and Burnett	TFSDA-1962-58-253
Benson, S. W.	BØKA-1960-408 (review)
Heicklen and Cohen	ADPCA-1968-5-203 (review)
Ray and Ogg	JCPSA-1957-26-984
Schott and Davidson	JACSA-1958-80-1841



Treacy and Daniels JACSA-1955-77-2033 (mechanism)



Ashmore and Burnett	TFSDA-1962-58-253
Ashmore and Levitt	RSCRA-1956-9-S25
Ashmore and Levitt	JCPSA-1957-27-318
Bortner and Kummler	*GESLZ-1969-RPT/GE-9500-ECS-SR-1 (review)
Brown and Crist	JCPSA-1941-9-840
Calhoun and Crist	JCPSA-1937-5-301 (mechanism)
Cowan, et al.	JCPSA-1953-21-1397
Crist and Wertz	JCPSA-1939-7-719
Davidson and Schott	JCPSA-1957-27-317
Edwards and Christie	CCOMA-1967-789
Foerster and Blich	ZACHA-1910-23-2017
Ford, H.	CJCHA-1960-38-1780 (calculation)
Ford and Endow	JCPSA-1957-27-1156 (mechanism)
Ford, et al.	ADCSA-1959-21-410
Ford, et al.	JCPSA-1960-32-1256
Heicklen and Cohen	ADPCA-1968-5-195 (review)
Hisatsune, et al.	JCPSA-1955-23-2467
Hisatsune, et al.	JACSA-1957-79-4648

$\text{NO} + \text{NO}_3 \rightarrow \text{NO}_2 + \text{NO}_2$ (Continued)

Husain and Norrish
 Johnston, H. S.
 Johnston, H. S.
 Johnston, H. S.
 Ogg, R. A., Jr.
 Schott and Davidson
 Schumacher, H. J.
 Smith and Daniels
 Tipper and Williams
 Treacy and Daniels
 Troe, J.

PRLAA-1963-273-165
 B66KA-1966-14 (review)
 B66KA-1966-299 (review)
 JACSA-1951-73-4542
 JCPSA-1950-18-572 (mechanism)
 JACSA-1958-80-1841 (review)
 B66KA-1938-311 (review)
 JACSA-1947-69-1735 (mechanism)
 TFS6A-1961-57-79 (mechanism)
 JACSA-1955-77-2033 (mechanism)
 BBPCA-1969-73-906

$\text{NO} + \text{O} \rightarrow \text{N} + \text{O}_2$

Atallah, S.
 Barnes, et al.
 Baulch, et al.
 Bortner, M. H.
 Bortner and Kummler
 Bortner and Kummler
 Clark, et al.
 Davidson, N.
 Fenimore and Jones
 Glick, et al.
 Kaufman and Decker
 Kaufman and Kelso
 Kaufman and Kelso
 Peng and Pindroh
 Pratt, N. H.
 Rozlovskii and Rodin
 Rozlovskii, A. I.
 Schofield, K.
 Sulzmann and Ludwig
 Vetter, K.
 Wilson, Wm. E., Jr.
 Wise and Frech
 Wise and Frech
 Wray, K. L.
 Wray and Teare
 Wray, et al.
 Zeldovich, J.

*AFCRL-1961-RPT/671 (evaluation)
 BMIRA-1964-RMI-197-10-2 (review)
 HTRRA-1969-4-19 (evaluation)
 NBTNA-1969-TN-484 (evaluation)
 DASRA-1967-RPT/1948 (evaluation)
 *GESLZ-1969-RPT/GE-9500-ECS-SR-1 (review)
 JCPSA-1969-51-2885
 *AVEVZ-1958-RPT/32 (review)
 JPCHA-1957-61-654
 JCPSA-1957-27-850
 SYMCA-1959-7-57
 SYMCA-1959-7-53
 JCPSA-1955-23-1702
 BBSDA-1963-RPT/D2-13422 (review)
 NGTRA-1963-Pratt (review)
 DKPCA-1967-177-819 (review)
 ZFKHA-1956-30-1349
 PLSSA-1967-15-643
 *CNRVZ-1961-RPT/ZPh-087 (review)
 ZEELA-1949-53-369
 *ICRPZ-1967-1-147
 JCPSA-1952-20-1724
 JCPSA-1953-21-752 (review)
 PGARA-1962-7-181 (review)
 JCPSA-1962-36-2582
 SYMCA-1962-8-328 (review)
 ACPYA-1946-21-577

$\text{NO} + \text{O} \rightarrow \text{NO} + \text{O}$ (exchange)

Herron and Klein
 Mayer, S. W.
 Mayer, S. W.

JCPSA-1964-40-2731
 JPCHA-1967-71-4159
 JPCHA-1969-73-3941

$\text{NO} + \text{O} \rightarrow \text{NO}_2^*$

Benson, S. W.
 Freedman and Kelso
 Jaffe and Klein
 Klein and Herron
 Klein and Herron
 Spindler, G. B.

JCPSA-1963-38-1251 (estimate)
 XOBRA-1969-RPT/1430 (mechanism)
 TFS6A-1966-62-3135
 JCPSA-1964-41-1285
 JCPSA-1966-44-3645
 PLSSA-1966-14-53 (mechanism)

$\text{NO} + \text{O} \rightarrow \text{NO}_2 + h\nu$

Applebaum, et al.
 Baulch, et al.
 Bortner and Kummler
 Bortner and Kummler
 Bulewicz and Sugden
 Clyne and Thrush
 Del Greco, et al.

PHCBA-1965-4-1003 (mechanism)
 HTRRA-1970-5-24 (evaluation)
 DASRA-1967-RPT/1948 (evaluation)
 *GESLZ-1969/RPT-GE-9500-ECS-SR-1 (review)
 CSSPA-1957-9-81
 PRLAA-1962-269-404
 JCPSA-1966-44-4349

$\text{NO} + \text{O} \rightarrow \text{NO}_2 + h\nu$ (Continued)

Doherty and Jonathan	DFS0A-1964-37-73
Fontijn and Rosner	JCPSA-1967-46-3275
Fontijn and Schiff	12GEA-1961-239
Fontijn, et al.	JCPSA-1964-40-64
Gaydon, A. G.	PRLAA-1944-183-111 (mechanism)
Golomb, et al.	JGREA-1965-70-1155
Good and Hill	*AFCRL-1965-RPT/66-284
Good, et al.	*AFCRL-1958-RPT/68-0143
Hartunian, et al.	JCPSA-1966-44-1765
Heicklen and Cohen	ADPCA-1968-5-237 (review)
Jonathan and Petty	TFS0A-1968-64-1240
Karmilova and Kondratiev	ZFKHA-1951-25-312
Kaskan, W. E.	CBFMA-1958-2-286
Kaufman, F.	PRKNA-1961-1-1 (review)
Kaufman, F.	JCPSA-1959-28-352
Kaufman, F.	PRLAA-1958-247-123 (estimate)
Kaufman and Kelso	SYMCA-1959-7-53
Kaufman, et al.	JCPSA-1956-25-106
Keyser, et al.	CHPLB-1968-2-523
Levitt, B. P.	JCPSA-1965-42-1038
Reeves, et al.	JCPSA-1964-41-764
Schiff, H. I.	AGEPA-1964-20-115 (review)
Spindler, G. B.	PLSSA-1966-14-53 (mechanism)
van der Blik and Cassanova	XCCIA-1967-AD-645516
van der Blik, et al.	PRGDA-1967-2-1543
Vanpee and Kineyko	JCPSA-1970-52-1619
Wurster and Marrone	*CARBZ-1961-RPT/QM-1373-A4
Young and Sharpless	JCPSA-1963-39-1071



Golomb and Good

JCPSA-1968-49-4176



Golomb and Good

JCPSA-1968-49-4176

Vanpee and Kineyko

JCPSA-1970-52-1619



Barton and Dove
 Baulch, et al.
 Benson, S. W.
 Bortner and Kummler
 Broida, et al.
 Clyne and Thrush
 Doherty and Jonathan
 Fenimore, C. P.
 Fishburne and Edse
 Fontijn and Schiff
 Fontijn, et al.
 Ford and Endow
 Ford and Jaffe
 Ford, et al.
 Garvin, et al.
 Harteck, P.
 Harteck, et al.
 Hartley and Thrush
 Hartley and Thrush
 Hartunian, et al.
 Heicklen and Cohen
 Huffman and Davidson
 Jaffe and Klein
 Jonathan, N.
 Kaskan, W. E.
 Kaufman, F.

CJCHA-1969-47-521 (mechanism)
 HTRRA-1970-5-15 (evaluation)
 JACSA-1969-91-2152 (mechanism)
 DASRA-1967-RPT/1948 (evaluation)
 TFS0A-1961-57-259 (mechanism)
 PRLAA-1962-269-404
 DFS0A-1964-37-73
 JCPSA-1961-35-2243
 JCPSA-1966-44-515
 12GEA-1961-239
 JCPSA-1964-40-64
 JCPSA-1957-27-1156
 JCPSA-1963-38-2935
 ADCSA-1959-21-410
 CJCHA-1960-38-1795
 DFS0A-1964-37-220 (review)
 JCPSA-1958-29-1333
 DFS0A-1964-37-220 (review)
 PRLAA-1967-297-520
 JCPSA-1966-44-1765
 ADPCA-1968-5-237 (review)
 JACSA-1959-81-2311
 TFS0A-1966-62-3135
 DFS0A-1964-37-221 (review)
 CBFMA-1958-2-286
 JCPSA-1958-28-352

$\text{NO} + \theta + M \rightarrow \text{NO}_2 + M$ (Continued)

Kaufman, F.	PRKNA-1961-1-1 (review)
Kaufman, F.	PRLAA-1958-247-123 (rates and mechanism)
Kaufman and Kelso	12GEA-1961-255
Kaufman and Kelso	*SYCLZ-1965-65
Kaufman and Kelso	SYMCA-1959-7-53
Kaufman, et al.	JCPSA-1956-25-106
Kistiakowsky and Volpi	JCPSA-1957-27-1141 (rates and mechanism)
Klein and Herron	JCPSA-1964-41-1285
Lindars and Hinselwood	PRLAA-1955-231-162 (mechanism)
Mearns and Morris	JPCHA-1970-74-3999
Miyazaki and Takahashi	MDPCA-1968-8-777
Miyazaki and Takahashi	MDPCA-1969-9-625
Ogrzylo and Schiff	CJCHA-1959-37-1690 (rates and mechanism)
Reeves, et al.	JCPSA-1964-41-764
Schiff, H. I.	AGEPA-1964-20-115 (review)
Schuck, et al.	JPCAA-1966-11-695
Slanger and Black	JCPSA-1970-53-3717
Spealman and Rodebush	JACSA-1935-57-1474 (mechanism)
Spindler, G. B.	PLSSA-1966-14-53 (estimate)
Stuhl and Niki	CHPLR-1970-7-197
Troe, J.	BBPCA-1969-73-144
Troe, J.	BBPCA-1969-73-906
Vetter, K.	ZEELA-1949-53-369
Westenberg and de Haas	JCPSA-1964-40-3087
Zabolotskii, T. V.	JGCHA-1950-20-1449 (mechanism)

 $\text{NO} + \theta + M \rightarrow \text{NO}_2^* + M$

Becker, et al.	BBPCA-1968-72-157
Becker, et al.	*BPCHZ-1968-SHA/2
Becker, et al.	CHPLB-1970-6-583
Broida, et al.	TFSOA-1961-57-259 (mechanism)
Bulewicz and Sugden	CSSPA-1957-9-81 (mechanism)
Clyne and Thrush	PRLAA-1962-269-404
Doherty and Jonathan	DFSQA-1964-37-73 (mechanism)
Golomb and Good	JCPSA-1968-49-4176
Jonathan, N.	DFSQA-1964-37-221 (review)
Jonathan and Petty	TFSOA-1968-64-1240
Karmilova and Kondratiev	ZFKHA-1951-25-312
Kaufman, F.	DFSQA-1964-37-219 (review)
Kaufman, F.	PRLAA-1958-247-123 (mechanism)
Kaufman and Kelso	*SYCLZ-1965-65
Keyser, et al.	CHPLB-1968-2-523
McKenzie and Thrush	CHPLB-1968-1-681
Reeves, et al.	JCPSA-1964-41-764
Spealman and Rodebush	JACSA-1935-57-1474 (mechanism)

 $\text{NO} + \theta + M \rightarrow \text{NO}_2 + M + h\nu$

Freedman and Kelso	XOBRA-1969-RPT/1430 (mechanism)
Golomb and Good	JCPSA-1968-49-4176
Takahashi, S.	MDPCA-1968-8-611
Young and Sharpless	JCPSA-1963-39-1071

 $\text{NO} + \theta_2 \rightarrow \text{NO}_2 + \theta$

Baulch, et al.	HTRRA-1970-5-8 (evaluation)
Raizer, Yu. P.	ZFKHA-1959-33-700 (calculation)
Vetter, K.	ZEELA-1949-53-376

 $\text{NO} + \theta_2 \rightarrow \text{NO}_3$

Crist and Wertz	JCPSA-1939-7-719
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$\text{NO} + \text{O}_2 \rightarrow \text{NO}_3$ (Continued)

Foerster and Blich
Schumacher, H. J.
Tipper and Williams
Treacy and Daniels

ZACHA-1910-23-2017 (mechanism)
BOOKA-1938-311 (review)
TFSOA-1961-57-79 (mechanism)
JACSA-1955-77-2033 (mechanism)

$\text{NO} + \text{O}_3 \rightarrow \text{NO}_2 + \text{O}_2$

Borok, M. T.
Borok, M. T.
Bortner and Kummeler
Clough and Thrush
Clough and Thrush
Clyne, et al.

JPCUA-1960-34-129
JPCUA-1961-35-1123
*GESLZ-1968-RPT/GE-9500-ECS-SR-1 (review)
CCOMA-1966-783
TFSOA-1967-63-915
TFSOA-1964-60-359 (rates and mechanism)
JCPSA-1957-27-1156 (mechanism)
ADCSA-1959-21-410
JCPSA-1957-26-1337
JCPSA-1960-32-1256
ADPCA-1968-5-222 (review)
JCPSA-1956-25-736
JCPSA-1951-19-799
JCPSA-1954-22-689
JCPSA-1963-39-3277
DFSOA-1962-33-118
JCPSA-1962-36-1509
JCPSA-1962-37-924
AGEPA-1964-20-115 (review)
PLSSA-1967-15-643
IECHA-1956-48-1498 (mechanism)
CHMBA-1966-2-287 (rates and mechanism)
JGCHA-1950-20-1441 (mechanism)
JGCHA-1950-20-1449 (mechanism)
Zabolotskii and Solnyshkova JGCHA-1950-20-1445 (mechanism)

$\text{NO} + \text{O}_3 \rightarrow \text{NO}_2^* + \text{O}_2$

Clyne, et al.
Thrush, B. A.

TFSOA-1964-60-359
CHMBA-1966-2-287

$\text{NO} + \text{O}_3 \rightarrow \text{NO}_3 + \text{O}$

Zabolotskii, T. V.

JGCHA-1950-20-1449 (mechanism)

$\text{NO}_2^* \rightarrow \text{N} + \text{O}_2$

Klein and Herron
Klein and Herron

JCPSA-1964-41-1285
JCPSA-1966-44-3645

$\text{NO}_2^* \rightarrow \text{NO}_2 + h\nu$

Baxter, W. P.
Becker, et al.
Becker, et al.
Blacet, et al.
Broida, et al.
Bulewicz and Sugden
Clough and Thrush
Clyne and Thrush
Clyne, et al.
Doherty and Jonathan
Douglas, A. E.
Ford and Jaffe
Freedman and Kelso

JACSA-1930-52-3920
BBPCA-1968-72-157
*BPCHZ-1968-SHA/2
JACSA-1962-84-4011
TFSOA-1967-57-259
CSSPA-1957-9-81 (mechanism)
TFSOA-1967-63-915
PRLAA-1962-269-404
TFSOA-1964-60-359 (mechanism)
DFSOA-1964-37-73 (mechanism)
JCPSA-1966-45-1007
JCPSA-1963-38-2935
XOBRA-1969-RPT/1430 (mechanism)

$\text{NO}_2^* \rightarrow \text{NO}_2 + h\nu$ (Continued)

Golomb and Good
 Hartley and Thrush
 Hiraoka and Hardwick
 Jonathan, N.
 Jonathan and Petty
 Karmilova and Kondratiev
 Kaufman, F.
 Kaufman, F.
 Kaufman and Kelso
 Keyser, et al.
 Keyser, et al.
 Levitt, B. P.
 Levitt, B. P.
 Myers, et al.
 Neuberger and Duncan
 Norrish, R. G. W.
 Norrish, R. G. W.
 Paulsen, et al.
 Reeves, et al.
 Sackett and Yardley
 Sakurai and Capelle
 Schwartz, S. E.
 Schwartz and Johnston
 Spindler, G. B.
 Stuhl and Niki
 Thrush, B. A.

JCPUSA-1968-49-4176
 DFSOA-1964-37-220 (review)
 JCPUSA-1963-39-2361
 DFSOA-1964-37-221 (review)
 TFSOA-1968-64-1240
 ZFKHA-1951-25-312
 PRLAA-1958-247-123 (mechanism)
 DFSOA-1964-37-219 (review)
***SYCLZ-1965-65**
 CHPLB-1968-2-523
 JCPUSA-1971-54-355
 TFSOA-1962-58-1789
 DFSOA-1964-37-222 (review)
 JCPUSA-1966-44-718
 JCPUSA-1954-22-1693
 JCSOA-1929-1604 (mechanism)
 JCSOA-1929-1611
 JCPUSA-1970-53-647
 JCPUSA-1964-41-764
 CHPLB-1970-6-323
 JCPUSA-1970-53-3764
 PHDTA-1968-Calif. Univ., Berkeley
 JCPUSA-1969-51-1286
 PLSSA-1966-14-53 (mechanism)
 CHPLB-1970-7-197
 CHMBA-1966-2-287

 $\text{NO}_2 + h\nu \rightarrow \text{NO} + \theta$

Blacet, et al.
 Ford, H.
 Ford and Endow
 Ford and Jaffe
 Ford, et al.
 Gaedtke and Troe
 Gaydon, A. G.
 Husain and Norrish
 Lipscomb, et al.
 Pitts, et al.
 Pitts, et al.
 Preston and Cvetanovic
 Stephen, et al.
 Troe, J.

JACSA-1962-84-4011 (quantum yield)
 CJCHA-1960-38-1780 (review)
 JCPUSA-1957-27-1156 (mechanism)
 JCPUSA-1963-38-2935 (quantum yield)
 JCPUSA-1957-26-1337
 ZENAA-1970-25-789
 PRLAA-1944-183-111 (mechanism)
 PRLAA-1963-273-165
 PRLAA-1956-233-455 (mechanism)
 JCPUSA-1963-39-238 (quantum yield)
 JCPUSA-1964-42-3655 (quantum yield)
***CCKNZ-1971-4-Preprint** (review and mechanism)
 IECHA-1956-48-1498 (mechanism)
 BBPCA-1969-73-906

 $\text{NO}_2 + h\nu \rightarrow \text{NO} + \theta^*$

Cvetanovic, R. J.
 Hampson and Okabe
 Preston and Cvetanovic

JCPUSA-1965-43-1850 (mechanism)
 JCPUSA-1970-52-1930 (quantum yield)
 JCPUSA-1966-45-2888 (mechanism)

 $\text{NO}_2 + h\nu \rightarrow \text{NO} + 1/2\theta_2$

Baxter and Dickinson
 Dickinson and Baxter
 Holmes and Daniels
 Norrish, R. G. W.
 Norrish, R. G. W.
 Norrish, R. G. W.

JACSA-1929-51-109
 JACSA-1928-50-774 (quantum yield)
 JACSA-1934-56-630 (quantum yield)
 JCSOA-1927-761
 JCSOA-1929-1158 (quantum yield and mechanism)
 JCSOA-1929-1604 (mechanism)

 $\text{NO}_2 + M \rightarrow \text{NO} + \theta + M$

Baulch, et al.
 Davidson, N.

HTRRA-1970-5-10 (evaluation)
***AVEVZ-1958-RPT/32** (review)

$\text{NO}_2 + \text{M} \rightarrow \text{NO} + \text{O} + \text{M}$ (Continued)

Fishburne and Edse	JCPSA-1966-44-515
Fishburne, et al.	JCPSA-1965-43-1847
Fishburne, et al.	*OSCMU-1965-Ohio State Univ.
Hiraoka and Hardwick	JCPSA-1963-39-2361
Huffman and Davidson	JACSA-1959-81-2311
Jungen and Troe	BBPCA-1970-74-276
Levitt, B. P.	TFSOA-1962-58-1789
Levitt, B. P.	TFSOA-1963-59-59 (estimate)
Steinberg and Lyon	ACANA-1957-131-51R
Troe, J.	BBPCA-1969-73-112
Troe, J.	BBPCA-1969-73-144
Troe, J.	BBPCA-1969-73-906
Troe and Wagner	BBPCA-1967-71-937 (review)
Vetter, K.	ZEELA-1949-53-376
Zimet, E.	JCPSA-1970-53-515

$\text{NO}_2^* + \text{M} \rightarrow \text{NO} + \text{O} + \text{M}$

Broida, et al.	TFSOA-1961-57-259 (mechanism)
Jonathan, N.	DFSOA-1964-37-221 (review)
Karmilova and Kondratiev	ZFKHA-1951-25-312
Kaufman, F.	PRLAA-1958-247-123 (mechanism)
Kaufman, F.	DFSOA-1964-37-219 (review)
Klein and Herron	JCPSA-1964-41-1285
Klein and Herron	JCPSA-1966-44-3645
Spindler, G. B.	PLSSA-1966-14-53 (mechanism)

$\text{NO}_2 + \text{M} \rightarrow \text{NO}_3, \text{N}_2, \text{O}_2$ (overall decomposition)

Fishburne, et al.	*OSCMU-1965-Ohio Univ.
Preston and Cvetanovic	*CCKNZ-1971-4-Preprint (review and mechanism)
Preston and Cvetanovic	*CCKNZ-1971-4-Preprint (review and mechanism)

$\text{NO}_2^* + \text{M} \rightarrow \text{NO}_2 + \text{M}$ (electronic)

Baxter, W. P.	JACSA-1930-52-3920
Becker, et al.	BBPCA-1968-72-157
Becker, et al.	*BPCHZ-1968-SHA/2
Blacet, et al.	JACSA-1962-84-4011
Broida, et al.	TFSOA-1961-57-259 (mechanism)
Bulewicz and Sugden	CSSPA-1957-81 (mechanism)
Clough and Thrush	CCOMA-1966-783 (mechanism)
Clough and Thrush	TFSOA-1967-63-915
Clyne and Thrush	PRLAA-1962-269-404
Clyne, et al.	TFSOA-1964-60-359 (mechanism)
Doherty and Jonathan	DFSOA-1964-37-73 (mechanism)
Ford and Jaffe	JCPSA-1963-38-2935
Freedman and Kelso	XOBRA-1969-RPT/1430 (mechanism)
Hartley and Thrush	DFSOA-1964-37-220 (review)
Jonathan, N.	DFSOA-1964-37-221 (review)
Karmilova and Kondratiev	ZFKHA-1951-25-312
Kaufman, F.	PRLAA-1958-247-123 (mechanism)
Kaufman, F.	DFSOA-1964-37-219 (review)
Kaufman and Kelso	*SYCLZ-1965-65
Keyser, et al.	CHPLB-1968-2-523
Keyser, et al.	JCPSA-1971-54-355
Klein and Herron	JCPSA-1964-41-1285
Klein and Herron	JCPSA-1966-44-3645
Levitt, B. P.	TFSOA-1962-58-1789
Myers, et al.	JCPSA-1966-44-718
Reeves, et al.	JCPSA-1964-41-764
Sakurai and Capelle	JCPSA-1970-53-3764
Schwartz, S. E.	PHDTA-1968-Calif. Univ., Berkeley
Schwartz and Johnston	JCPSA-1969-51-1286



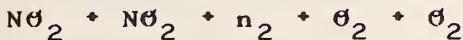
Spindler, G. B.
Thrush, B. A.
Troe, J.

PLSSA-1966-14-53 (mechanism)
CHMBA-1966-2-287
BPCA-1969-73-906



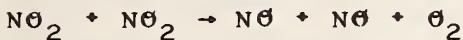
Spindler, G. B.

PLSSA-1966-14-53 (mechanism)



Joshi, S. S.
Joshi, S. S.
Joshi, S. S.
Joshi, S. S.

TFSOA-1927-23-227 (mechanism)
TFSOA-1929-25-108 (mechanism)
TFSOA-1929-25-118 (mechanism)
TFSOA-1929-25-137 (mechanism)



Ashmore and Burnett
Ashmore and Levitt
Ashmore and Tyler
Baulch, et al.
Bodenstein (Ramstetter)
Calhoun and Crist
Fishburne, et al.
Fishburne, et al.
Herschbach, et al.
Hiraoka and Hardwick
Huffman and Davidson
Kassel, L. S.
Lacoste, et al.
Musgrave and Hinshelwood
Norrish, R. G. W.
Rosser and Wise
Schofield, K.
Schumacher, H. J.
Schumacher, H. J.
Zimet, E.

TFSOA-1962-58-253
RSCRA-1956-9-S25
JCTLA-1962-1-39
HTRRA-1970-5-45 (evaluation)
ZEPCA-1922-100-106
JCPSA-1937-5-301 (mechanism)
JCPSA-1965-43-1847
*OSCOU-1965-Ohio State Univ.
JCPSA-1956-25-736
JCPSA-1963-39-2361
JACSA-1959-81-2311
ACMJA-1932-57-156 (evaluation)
JCPQA-1970-67-736
PRLAA-1932-135-23
NATUA-1928-122-923
JCPSA-1956-24-493
PLSSA-1967-15-643
BOOKA-1938-280 (review)
ZEELA-1941-47-673 (review)
JCPSA-1970-53-515



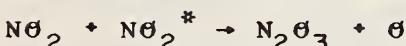
Blacet, et al.
Ford, H.
Norrish, R. G. W.
Norrish, R. G. W.

JACSA-1962-84-4011
CJCHA-1960-38-1780 (calculation)
JCSOA-1929-1158 (mechanism)
JCSOA-1929-1604 (mechanism)



Ashmore and Burnett
Ashmore and Levitt
Ashmore and Levitt
Davidson and Schott
Fishburne, et al.
Fishburne, et al.
Huffman and Davidson
Levitt, B. P.
Schott and Davidson

TFSOA-1962-58-253
JCPSA-1957-27-318
RSCRA-1956-9-S25
JCPSA-1957-27-317
JCPSA-1965-43-1847
*OSCOU-1965-Ohio State Univ.
JACSA-1959-81-2311
JCPSA-1965-42-1038
JACSA-1958-80-1841



Ford and Jaffe

JCPSA-1963-38-2935



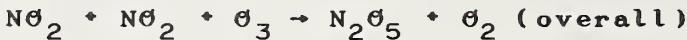
Carrington and Davidson
 Selle, H.
 Wegener, P. P.
 Wegener, P. P.
 Wegener, P. P.
 Wegener, P. P.

JPCHA-1953-57-418
 ZEPCA-1923-104-1
 JCPSA-1958-28-724
 PFLDA-1959-2-264
 JARSA-1960-30-322
 CPRCA-1961-4-261



Schott and Davidson

JACSA-1958-80-1841



Johnston, H. S.
 Johnston, H. S.
 Johnston and Yost
 Nordberg, M. E.
 Schumacher and Sprenger
 Schumacher and Sprenger

BGOKA-1966-14 (review)
 BGOKA-1966-299 (review)
 JCPSA-1949-17-386
 SCIEA-1929-70-580
 ZEPCA-1928-136-77 (mechanism)
 ZEPCA-1929-140-281



Ashmore and Burnett
 Ashmore and Levitt
 Ashmore and Levitt
 Benson, S. W.
 Davidson and Schott
 Ford, H. W.
 Ford and Endow
 Johnston, H. S.
 Johnston, H. S.
 Johnston, H. S.
 Ogg, R. A., Jr.
 Ogg, R. A., Jr.
 Ogg, R. A., Jr.
 Schott and Davidson

TFSOA-1962-58-253
 JCPSA-1958-27-318
 RSCRA-1956-9-S25
 BGOKA-1960-408 (review)
 JCPSA-1957-27-317
 CJCHA-1960-38-1780
 JCPSA-1957-27-1156
 BGOKA-1966-14 (review)
 BGOKA-1966-299 (review)
 JACSA-1951-73-4542
 JCPSA-1947-15-337 (mechanism)
 JCPSA-1947-15-613 (mechanism)
 JCPSA-1950-18-572 (mechanism)
 JACSA-1958-80-1841



Blacet, et al.
 Ford, H.
 Ford and Jaffe
 Pitts, et al.

JACSA-1962-84-4011
 CJCHA-1963-38-1780
 JCPSA-1963-38-2935
 JCPSA-1964-42-3655



Ford and Jaffe

JCPSA-1963-38-2935



Benson, S. W.
 Cowan, et al.
 Ford and Endow
 Ford, et al.
 Hisatsune, et al.
 Hisatsune, et al.
 Johnston, H. S.
 Johnston, H. S.
 Johnston, H. S.
 Johnston and Yost
 Kassel, L. S.
 Lowry and Seddon
 Ogg, R. A., Jr.
 Ogg, R. A., Jr.
 Ogg, R. A., Jr.

BGOKA-1960-408 (review)
 JCPSA-1953-21-1397
 JCPSA-1957-37-1156 (mechanism)
 JCPSA-1960-32-1256
 JACSA-1957-79-4648
 JCPSA-1955-23-2467
 BGOKA-1966-14 (review)
 BGOKA-1966-299 (review)
 JACSA-1951-73-4542
 JCPSA-1949-17-386
 ACMOA-1932-249 (review)
 JCSOA-1938-626 (mechanism)
 JCPSA-1947-15-337 (mechanism)
 JCPSA-1947-15-613 (mechanism)
 JCPSA-1950-18-572 (mechanism)

$\text{NO}_2 + \text{NO}_3 + M \rightarrow \text{N}_2\text{O}_5 + M$ (Continued)

Ogg, R. A., Jr.	JCPSA-1953-21-2079 (mechanism)
Schott and Davidson	JACSA-1958-80-1841
Schumacher, H. J.	B00KA-1938-419 (review)
Schumacher and Sprenger	ZEPCA-1928-136-77 (mechanism)
Schumacher and Sprenger	ZACHA-1929-42-697 (review)
Schumacher and Sprenger	ZEPCA-1929-140-281 (mechanism)
Schumacher and Sprenger	ZPCBA-1929-2-267
Smith and Daniels	JACSA-1947-69-1735 (mechanism)
Sprenger, G.	ZEELA-1931-37-674 (mechanism)
Treacy and Daniels	JACSA-1955-77-2033 (mechanism)



Johnston, H. S.

B00KA-1966-14



Baulch, et al.
 Benson, S. W.
 Bortner and Kummler
 Bortner and Kummler
 Callear and Smith
 Clyne and Thrush
 Clyne and Thrush
 Clyne, et al.
 Felmlee, et al.
 Fishburne, et al.
 Fishburne, et al.
 Ford and Endow
 Ford, et al.
 Henriques, et al.
 Herron and Klein
 Herron and Schiff
 Hiraoka and Hardwick
 Huffman and Davidson
 Husain and Norrish
 Kaufman, F.

Kaufman, F.
 Kaufman and Kelso

Kistiakowsky and Kydd

Kistiakowsky and Volpi
 Klein and Herron
 Mayer, S. W.
 Mayer, S. W.
 Nutt and Biddlestone
 Ogryzlo and Schiff
 Phillips and Schiff
 Preston and Cvetanovic
 Preston and Cvetanovic
 Schiff, H. I.
 Schofield, K.
 Schuck, et al.
 Smith, I. W. M.
 Spealman and Rodebush
 Stephens, et al.
 Stuhl and Niki
 Takezaki and Mori
 Takezaki and Mori
 Troe, J.
 Tunder, et al.
 Vetter, K.
 Westenberg and de Haas

HTRRA-1970-5-1 (evaluation)
JCPSA-1963-38-1251 (mechanism)
DASRA-1967-RPT/1948 (evaluation)
*GESLZ-1969-RPT/GE-9500-ECS-SR-1 (review)
NATUA-1967-213-382
TFSGA-1962-58-511 (^{18}O tracer)
JCPSA-1963-38-1252 (mechanism)
PRLAA-1966-295-355
*DWCMZ-1966-RPT/SL-175311-a
JCPSA-1965-43-1847
*OSCDU-1965-Ohio State Univ.
JCPSA-1957-27-1156
ADCDA-1959-21-410
JCPSA-1938-6-518
JCPSA-1964-40-2731
CJCHA-1958-36-1159
JCPSA-1963-39-2361
JACSA-1959-81-2311 (estimate)
PRLAA-1963-273-165
JCPSA-1958-28-352 (lower limit estimate)
PRLAA-1958-247-123
SYMCA-1959-7-53 (lower limit estimate)
JACSA-1957-79-4825 (lower limit estimate)
JCPSA-1957-27-1141
JCPSA-1964-41-1285
JPCHA-1967-71-4159 (calculation)
JPCHA-1969-73-3941 (calculation)
TFSGA-1962-58-1376
CJCHA-1959-37-1690 (mechanism)
JCPSA-1962-36-1509
CJCHA-1966-44-2445
JCPSA-1966-45-2888
AGEPA-1964-20-115 (review)
PLSSA-1967-15-643
JPCAA-1966-11-695
TFSGA-1968-64-378
JACSA-1935-57-1474
IECHA-1956-48-1498 (mechanism)
CHPLB-1970-7-197
BICRA-1967-46-388
BBPCA-1968-72-157
BBPCA-1969-73-906
*ASTSZ-1967-RPT/TR-1001(9210-02)-1
ZEELA-1949-53-376
JCPSA-1969-50-707



Kane, et al.
Lipscomb, et al.

JCPSPA-1963-39-840 (mechanism)
PRLAA-1956-233-455 (mechanism)



Stair and Kennealy

JCPQA-1967-64-124 (mechanism)



Preston and Cvetanovic

JCPSPA-1966-45-2888 (${}^1\text{D}$)



Bulewicz and Sugden

CSSPA-1957-9-81 (mechanism)



:

Herron and Klein

JCPSPA-1964-40-2731



Benson, S. W.
Ford, H. W.
Ford and Endow
Klein and Herron
Klein and Herron
Troe, J.

JCPSPA-1963-38-1251 (estimate)
CJCHA-1960-38-1780
JCPSPA-1957-27-1156
JCPSPA-1964-41-1285
JCPSPA-1966-44-3645
BBPCA-1969-73-906



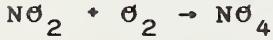
Benson, S. W.
Callear and Smith
Davidson, N.
Ford and Endow
Ford, et al.
Husain and Norrish
Jaffe and Klein
Kaufman, F.
Schuck, et al.
Smith, I. W. M.
Troe, J.

JCPSPA-1963-38-1251 (mechanism)
NATUA-1967-213-382
*AVEVZ-1958-RPT/32 (review)
JCPSPA-1957-27-1156
ADCSA-1959-21-410
PRLAA-1963-273-165
TFSOA-1966-62-3135
PRKNA-1961-1-1 (review)
JPCAA-1966-11-695
TFSOA-1968-64-378
BBPCA-1969-73-906



Davidson, N.

*AVEVZ-1958-RPT/32 (review)



Ogg, R. A., Jr.

JCPSPA-1953-21-2079 (mechanism)



Stephens, et al.

IECHA-1956-48-1498



Benson, S. W.
Bortner and Kummler
Ford, H.
Ford, et al.

B00KA-1969-408 (review)
*GESLZ-1969-RPT/GE-9500-ECS-SR1 (review)
SYMCA-1962-8-119 (review)
ADCSA-1959-21-410

$\text{NO}_2 + \text{O}_3 \rightarrow \text{NO}_3 + \text{O}_2$ (Continued)

Ford, et al.	JCP CSA-1957-26-1336
Ford, et al.	JCP CSA-1960-32-1256
Herschbach, et al.	JCP CSA-1956-25-736
Johnston, H. S.	BØØKA-1966-14 (review)
Johnston, H. S.	BØØKA-1966-299 (review)
Johnston, H. S.	JACSA-1951-73-4542
Johnston and Crosby	JCP CSA-1954-22-689
Johnston and Yost	JCP CSA-1949-17-386
Kassel, L. S.	ACMØA-1932-57-249
Lowry and Seddon	JCSØA-1938-626 (mechanism)
Schiff, H. I.	AGEPA-1964-20-115 (review)
Schott and Davidson	JACSA-1958-80-1841 (review)
Schumacher, H. J.	BØØKA-1938-419 (review)
Schumacher and Sprenger	ZACHA-1929-42-697 (review)
Schumacher and Sprenger	ZEPCA-1928-136-77 (mechanism)
Schumacher and Sprenger	ZEPCA-1929-140-281 (mechanism)
Schumacher and Sprenger	ZPCBA-1929-2-267
Sprenger, G.	ZEELA-1931-37-674 (mechanism)

$\text{NO}_3 \rightarrow \text{NO} + \text{O}_2$

Crist and Wertz	JCP CSA-1939-7-719
Schumacher, H. J.	BØØKA-1938-311 (review)
Schumacher and Sprenger	ZEPCA-1928-136-77 (mechanism)

$\text{NO}_3^* \rightarrow \text{NO} + \text{O}_2$

Ford, H. W.	CJCHA-1960-38-1780
Klein and Herron	JCP CSA-1964-41-1285
Klein and Herron	JCP CSA-1966-44-3645
Troe, J.	BBPCA-1969-73-906

$\text{NO}_3^* \rightarrow \text{NO}_2 + \text{O}$

Blacet, et al.	JACSA-1962-84-4011
Ford, H. W.	CJCHA-1960-38-1780
Ford and Endow	JCP CSA-1957-27-1156
Ford and Jaffe	JCP CSA-1963-38-2935
Klein and Herron	JCP CSA-1964-41-1285
Klein and Herron	JCP CSA-1964-44-3645
Troe, J.	BBPCA-1969-73-906

$\text{NO}_3 + \text{M} \rightarrow \text{NO}_2 + \text{O} + \text{M}$

Huffman and Davidson	JACSA-1959-81-2311 (review)
Zabolotskii, T. V.	JGCHA-1950-20-1449 (mechanism)

$\text{NO}_3^* + \text{M} \rightarrow \text{NO}_3 + \text{M}$

Blacet, et al.	JACSA-1962-84-4011
Ford, H. W.	CJCHA-1960-38-1780
Ford and Endow	JCP CSA-1957-27-1156
Ford and Jaffe	JCP CSA-1963-38-2935
Klein and Herron	JCP CSA-1964-41-1285
Klein and Herron	JCP CSA-1966-44-3645
Pitts, et al.	JCP CSA-1964-42-3655
Troe, J.	BBPCA-1969-73-906

$\text{NO}_3 + \text{NO}_3 \rightarrow \text{NO}_2 + \text{NO}_2 + \text{O}_2$

Benson, S. W.	BØØKA-1960-408 (review)
Johnston, H. S.	BØØKA-1966-14 (review)
Johnston, H. S.	BØØKA-1966-299 (review)
Johnston, H. S.	JACSA-1951-73-4542

$\text{NO}_3 + \text{NO}_3 \rightarrow \text{NO}_2 + \text{NO}_2 + \text{O}_2$ (Continued)

Kassel, L. S.	ACM θ A-1932-57-249 (review)
Lowry and Seddon	JCS θ A-1938-626 (mechanism)
Schott and Davidson	JACSA-1958-80-1841
Schumacher, H. J.	B θ OKA-1938-419 (review)
Schumacher and Sprenger	ZACHA-1929-42-697 (review)
Schumacher and Sprenger	ZPCBA-1929-2-267
Sprenger, G.	ZEELA-1931-37-674 (mechanism)
$\text{NO}_3 + \text{NO}_4 \rightarrow \text{NO}_3 + \text{NO}_4$ (exchange)	
Ogg, R. A., Jr.	JCP θ A-1953-21-2079 (mechanism)
$\text{NO}_3 + \text{O} \rightarrow \text{NO}_2 + \text{O}_2$	
Bortner and Kummler	*GESLZ-1969-RPT/GE-9500-ECS-SR-1 (review)
$\text{NO}_3 + \text{O}_2 \rightarrow \text{NO}_2 + \text{O}_3$	
Schott and Davidson	JACSA-1958-80-1841
$\text{NO}_3 + \text{O}_3 \rightarrow \text{NO}_2 + \text{O}_2 + \text{O}_2$	
Benson, S. W.	B θ OKA-1960-418 (lower limit estimate)
Lowry and Seddon	JCS θ A-1938-628 (mechanism)
Schumacher and Sprenger	ZEPCA-1928-136-77 (mechanism)
$\text{NO}_4 \rightarrow \text{NO}_2 + \text{O}_2$	
Ogg, R. A., Jr.	JCP θ A-1953-21-2079 (mechanism)

I(b). REVIEWS

Barth, C. A.	AGEPA-1964-20-182
Baulch, et al.	HTRRA-1969-4 (evaluation)
Baulknight, C.	GQRZZ-1965-RPT/RM-274 (evaluation)
Benson, S. W.	BØKA-1960-408 (Nitrogen oxides)
Benson and O'Neal	NSRDA-1970-NBS 21 (nitrogen oxides: pgs. 553, 554, 555)
Bortner, M. H.	NBTNA-1969-TN-484 (evaluation)
Bortner and Kummler	DASRA-1967-RPT/1948 (Ch. 19: evaluation)
Bortner and Kummler	*GESLZ-1969-RPT/GE-9500-ECS-SR-1
Brocklehurst and Jennings	PRKNA-1967-4-1
Carrington and Garvin	*CCKNZ-1969-3-107 (mechanism)
Davidson, N.	*AVEVZ-1958-RPT/32
Ford, H. W.	CJCHA-1960-38-1780 (mechanism)
Ford, H. W.	SYMCA-1962-8-119 (mechanism)
Heicklen, J.	AIAJA-1967-5-4
Heicklen and Cohen	ADPCA-1968-5-157 (nitric oxide)
Johnston, H. S.	BØKA-1966 (nitrogen oxides: pgs. 14, 299)
Johnston, H. S.	NSRDA-1968-NBS 20
Kassel, L. S.	ACMØA-1932-57-156
Kaufman, F.	PRKNA-1961-1-1
Lin and Fyfe	PFLDA-1961-4-238
Mannella, G. G.	CHREA-1963-63-1
Nicolet, M.	JGREA-1965-70-679
Peng and Pindroh	BBSDA-1963-RPT/D2-13422
Pratt, N. H.	NGTRA-1963-Pratt
Preston and Cvetanovic	*CCKNZ-1971-4-Preprint
Ratajczak and Trotman-Dickenson	*ØSTIZ-1970-UWIST (general tables)
Schiff, H. I.	AGEPA-1964-20-115
Schofield, K.	PLSSA-1967-15-643
Schumacher, H. J.	BØKA-1938 (nitrogen oxides: pgs 131, 139, 147, 280, 285, 311, 419)
Troe and Wagner	BBPCA-1967-71-937
Trotman-Dickenson and Milne	NSRDA-1967-NBS-9 (general tables)
Wright and Winkler	PHCMB-1968-14 (active N ₂)

II(a). REACTIONS INVOLVING O SPECIES



Biedenkapp and Bair	JCPSA-1970-52-6119
Black, et al.	CJCHA-1969-47-1872 (¹ S)
Castellano and Schumacher	ZPCFA-1969-65-62
Clark, I. D.	CHPLB-1970-5-317 (¹ D)
Clerc, et al.	JCPSA-1969-50-3721
DeMore, W. B.	JCPSA-1970-52-4309
Donovan, et al.	CHPLB-1970-6-488
Filseth and Welge	JCPSA-1969-51-839
Filseth, et al.	JCPSA-1970-52-239 (¹ S)
Hampson and Okabe	JCPSA-1970-52-1930
Izod and Wayne	PRLAA-1968-308-81
Izod and Wayne	CHPLB-1969-4-208 (¹ D)
Jones, et al.	PRLAA-1970-316-431 (¹ D) (mechanism)
McConkey, et al.	PLSSA-1970-18-771
McGrath and McGarvey	PLSSA-1967-15-427 (review)
Noxon, J. F.	CJCHA-1969-47-1873
Noxon, J. F.	JCPSA-1970-52-1852
Scott and Cvetanovic	JCPSA-1971-54-1440 (¹ D)
Snelling and Bair	JCPSA-1967-47-228
Stuhl and Welge	CJCHA-1969-47-1870 (¹ S)
Warneck and Sullivan	PLSSA-1966-14-1225
Yamazaki, H.	CJCHA-1970-48-3269
Young, R. A.	CJCHA-1969-47-1927 (review)
Young and Black	JCPSA-1966-44-3741
Young, et al.	JCPSA-1968-49-4758 (¹ D)
Young, et al.	JCPSA-1968-49-4769 (¹ D, or ¹ S)
Young, et al.	JCPSA-1969-50-309 (¹ S)
Zipf, E. C.	CJCHA-1969-47-1863 (review)



Clark, I. D.	CHPLB-1970-5-317 [$\text{O}^* = ^1\text{D};$ $\text{M}^* = \text{O}_2^* (^1\Sigma_g^+)$]
Gauthier and Snelling	CHPLB-1970-5093 [$\text{O}^* = ^1\text{D};$ $\text{M}^* = \text{O}_2^* (^1\Sigma_g^+)$]
Izod and Wayne	NATUA-1968-217-947 [$\text{O}^* = ^1\text{D}; \text{M}^* = \text{O}_2^*$ $(\Delta_g, \text{ or } ^1\Sigma_g^+)$] (est)
Izod and Wayne	PRLAA-1968-30-881 [$\text{O}^* = ^1\text{D}; \text{M}^* = \text{O}_2^*$ $(^1\Delta_g, \text{ or } ^1\Sigma_g^+)$]
Izod and Wayne	CHPLB-1969-4-208 [$\text{O}^* = ^1\text{D};$ $\text{M}^* = \text{O}^* (^1\Sigma_g^+)$]
Jones, et al.	PRLAA-1970-316-431 [$\text{O}^* = ^1\text{D}; \text{M}^* = \text{O}_2^* (^1$ $\text{or } ^1\Sigma_g^+)$] (mechanism)
Scott and Cvetanovic	JCPSA-1971-54-1440 [$\text{O}^* = ^1\text{D};$ $\text{M}^* = \text{O}_2^* (^1\Sigma_g^+)$]



Hampson and Okabe

JCPSA-1970-52-1930 (1S to 1D)

- Ackermann, M.
Anderson, G. L.
Atallah, S.
Barnes, et al.
Barth, C. A.
Bascombe, K. N.
Bauer and Salkoff
Baulknight, C.
Benson and Fueno
Bortner, M. H.
Bortner and Kummler
Brabbs and Belles
Camac and Vaughan
Camac, et al.
Campbell and Nudelman
Campbell and Thrush
Campbell and Thrush
Cherry, et al.
Chesick and Kistiakowsky
Demetriades and Farber
Elias, et al.
Flaherty, et al.
Golden and Myerson
Golden and Myerson
Heims, S. P.
Hirschfelder, et al.
Jahn, S.
Jensen and Kurzius
Johnston, H. S.
Kaufman, F.
Kaufman, F.
Kaufman, F.
Kaufman and Kelso
Keck, J. C.
Kiefer and Lutz
Kretschmer, C. B.
Kretschmer, C. B.
Kretschmer and Petersen
Kretschmer and Petersen
Krongelb and Strandberg
Lin and Fyfe
Marshall, T. C.
Marshall, T. C.
Matthews, D. L.
Miyazaki and Takahashi
Miyazaki and Takahashi
Morgan and Schiff
Morgan, et al.
Moses and Wu
Nicolet, M.
Peng and Pindroh
Pratt, N. H.
Reeves, et al.
Rink, J. P.
Rink, et al.
Soloukhin, R. I.
Soloukhin, R. I.
Takahashi, S.
Warneck, P.
Wilson, J.
- DFSOA-1964-37-209 (review)
*UACHZ-1961-RPT/R-1828-1
*AFCRL-1961-RPT/761 (evaluation)
BMIRA-1964-RMI-197-10-2 (review)
*JPLCZ-1961-1-64
*ERDEZ-1965-RPT/E.R.D.E. 1/S/65
JCPSA-1960-33-1202
*GQRZZ-1965-RPT/RM-274 (evaluation)
JCPSA-1962-36-1597
NBTNA-1969-TN-484
*GESLZ-1969-RPT/GE-9500-ECS-SR-1 (review)
SYMCA-1967-11-125
JCPSA-1961-34-460
IAESA-1958-26-PR802
XCCIA-1960-AD 242327 (review)
PRLAA-1967-296-222
TFSOA-1968-64-1265
*TRWSZ-1967-RPT/08832-6001-T0000
JCPSA-1958-28-956
JARSA-1959-29-528
CJCHA-1959-37-1680
*GESLZ-1962-RPT/R62SD97
PLSSA-1961-3-175
JCPSA-1958-28-978
NACNA-1958-TN4144 (calculation)
JPCHA-1952-57-403
ZACMA-1906-48-260 (mechanism)
*ACRPZ-1967-RPT/TP-149
NSRDA-1968-NBS 20 (evaluation)
PRLAA-1958-247-123
PRKNA-1961-1-1 (review)
PFLDA-1963-6-1199
12GEA-1961-255
JCPSA-1960-32-1035
JCPSA-1965-42-1709
*AJGAZ-1959-RPT/1611
*AJGAZ-1962-RPT/AN-671
JCPSA-1960-33-948
JCPSA-1963-39-1772
JCPSA-1959-31-1196
PFLDA-1961-4-238 (review)
PFLDA-1963-6-1200
PFLDA-1962-5-743
PFLDA-1959-2-170
MDPCA-1968-8-777
MDPCA-1969-9-625
JCPSA-1963-38-1495
JCPSA-1960-33-930
PHRVA-1951-83-109
PAIRA-1954-RPT/61
BBSDA-1963-RPT/D2-13422 (review)
NGTRA-1963-Pratt (review)
JCPSA-1960-32-632
JCPSA-1962-36-572
JCPSA-1961-34-1942
CBFMA-1967-11-489
CESWA-1967-3-246
MDPCA-1970-9-733
JCPSA-1964-41-3435 (quantum yield)
PHDTA-1962-Cornell Univ.

$\Theta + \Theta + M \rightarrow \Theta_2 + M$ (Continued)

Wilson, J.
 Wise and Ablow
 Wise and Frech
 Wray, K. L.
 Wray, K. L.
 Young and Sharpless
 Zelikoff and Aschenbrandt

JFLSA-1963-15-497
 JCPSA-1961-35-10
 JCPSA-1952-20-1724 (mechanism)
 JCPSA-1963-38-1518
 SYMCA-1965-10-523
 JCPSA-1963-39-1071
 JCPSA-1954-22-1680 (mechanism)

 $\Theta + \Theta + M \rightarrow \Theta_2 + M^*$

Barth and Hildebrandt
 Mulcahy and Williams
 Young and Black
 Young and Black
 Young and Clark
 Young and Sharpless

JGREA-1961-66-985 (upper limit estimate)
 CHPLB-1970-7-455 (mechanism)
 JCPSA-1966-44-3741
 PLSSA-1966-14-113
 PRLTA-1960-5-320 (review)
 JCPSA-1963-39-1071

 $\Theta + \Theta + M \rightarrow \Theta_2^* + M$

Bauer and Salkoff
 Young and Black
 Young and Sharpless

JCPSA-1960-33-1202 (calculation)
 JCPSA-1966-44-3741
 JGREA-1962-67-3871

 $\Theta + \Theta + M \rightarrow \Theta_2 + M + h\nu$

Young and Sharpless

JCPSA-1963-39-1071

 $\Theta + \Theta_2 \rightarrow \Theta + \Theta_2$ (exchange)

Brennen and Niki
 Herron and Klein
 Jaffe and Klein
 Johnston and O'Shea
 Johnston, H. S.
 Klein and Herron
 Mayer, S. W.
 Mayer, S. W.
 Egg and Sutphen
 Egg and Sutphen

JCPSA-1965-42-3725
 JCPSA-1964-40-2731
 TFSOA-1966-62-3135
 JCPSA-1953-21-2080
 NSRDA-1968-NBS 20 (evaluation)
 JCPSA-1964-41-1285
 JPCHA-1967-71-4159
 JPCHA-1969-73-3941
 JCPSA-1953-21-2078
 DFSOA-1954-17-47

 $\Theta + \Theta_2 \rightarrow \Theta_3^*$

Hochanadel, et al.
 Klein and Herron
 Klein and Herron

JCPSA-1968-48-2416
 JCPSA-1964-41-1285
 JCPSA-1966-44-3645

 $\Theta^* + \Theta_2 \rightarrow \Theta + \Theta_2^*$ (energy transfer)

Clark, I. D.

CHPLB-1970-5-317

 $\Theta + \Theta_2 + M \rightarrow \Theta_3 + M$

Ackermann, M.
 Axworthy, A. E., Jr.
 Axworthy and Benson
 Basco, N.
 Bascombe, K. N.
 Benson, S. W.
 Benson, S. W.
 Benson and Axworthy
 Benson and Axworthy
 Beretta and Schumacher

DFSOA-1964-37-209 (review)
 PHDTA-1959-S. Calif. Univ.
 ADCSA-1959-21-388
 PRLAA-1965-283-302
 *ERDEZ-1965-RPT/E.R.D.E. 1/S/65
 JCPSA-1960-33-939 (review)
 JACSA-1969-91-2152 (mechanism)
 JCPSA-1957-26-1718
 JCPSA-1965-42-2614
 ZPCBA-1932-17-417

$\Theta_1 + \Theta_2 + M \rightarrow \Theta_3 + M$ (Continued)

- Bortner, M. H.
 Bortner and Kummler
 Bortner and Kummler
 Campbell and Nudelman
 Castellano and Schumacher
 Castellano and Schumacher
 Clyne, et al.
 Clyne, et al.
 Davidson, N.
 Demetriades, S. T.
 Devins, J. C.
 Dickens, et al.
 Donovan, et al.
 Elias, et al.
 Eucken, A.
 Eucken and Patat
 Fluegge and Meadrick
 Ford and Endow
 Ford, et al.
 Ford, et al.
 Ford, et al.
 Glissmann and Schumacher
 Groth, W.
 Groth, W.
 Hacker, et al.
 Harteck and Dondes
 Harteck and Dondes
 Harteck and Reeves
 Heidt, L. J.
 Hochanadel, et al.
 Intezarová and Kondrat'ev
 Jackson, W. F.
 Jackson and Kistiakowsky
 Jahn, S.
 Johnston, H. S.
 Jones and Davidson
 Kaufman, F.
 Kaufman, F.
 Kaufman, F.
 Kaufman and Kelso
 Kaufman and Kelso
 Kaufman and Kelso
 Kaufman and Kelso
 Klein and Herron
 Kretschmer, C. B.
 Kretschmer, C. B.
 Kretschmer and Petersen
 McGrath and Norrish
 Mathias and Schiff
 Mathias and Schiff
 Meaburn, et al.
 Miyazaki and Takahashi
 Mulcahy and Williams
 Nalbandjan, A. B.
 Nicolet, M.
 Ritchie, M.
 Sauer, M. C., Jr.
 Sauer and Dorfman
 Sauer and Dorfman
 Schofield, K.
 Schumacher, H. J.
 Schumacher, H. J.
 Schumacher, H. J.
 Schumacher, H. J.
 Slanger and Black
 Snelling, et al.
 Stephens, et al.
 Sutphen, W. T.
- NBTNA-1969-TN-484 (evaluation)
 DASRA-1967-RPT/1948 (evaluation)
 *GESLZ-1969-RPT/GE-9500-ECS-SR-1 (review)
 XCcia-1960-AD 242327 (review)
 ZPCFA-1962-34-198
 ZPCFA-1969-65-62
 DFSOA-1964-37-214
 TFSOA-1965-61-2701
 *AVEVZ-1958-RPT/32 (review)
 JASSA-1958-25-653
 JESOA-1956-103-460
 NATUA-1960-187-686
 TFSOA-1970-66-2551
 CJCHA-1959-37-1680
 ZEPCA-1923-107-436 (quantum yield)
 ZPCBA-1936-33-459
 *CARBZ-1970-RPT/RM-2777-B-1 (review)
 JCPSA-1957-27-1156
 JCPSA-1957-26-1337
 ADCSA-1959-21-410
 JCPSA-1960-32-1256
 ZPCBA-1933-21-323
 ZPCBA-1937-37-307 (quantum yield)
 ZPCBA-1937-37-315
 JCPSA-1961-35-1788
 JCPSA-1953-21-2240
 JCPSA-1953-21-2241
 XCCIA-1957-AD136421
 JACSA-1935-57-1710
 JCPSA-1968-48-2416
 BACCA-1967-2326
 JACSA-1934-56-2631
 JACSA-1930-52-3471
 ZACMA-1906-48-260 (mechanism)
 NSFDA-1968-NBS 20 (evaluation)
 JACSA-1962-84-2868
 JCPSA-1958-28-352
 PRLAA-1958-247-123
 PRKNA-1961-1-1
 12GEA-1961-255
 DFSOA-1964-37-26
 JCPSA-1964-40-1162
 JCPSA-1967-46-4541
 JCPSA-1964-41-1285
 *AJGAZ-1959-RPT/1611
 *AJGAZ-1962-RPT/AN-671
 JCPSA-1960-33-948
 PRLAA-1957-242-265
 DFSOA-1964-37-38
 JCPSA-1964-40-3118
 JPCHA-1968-72-3920
 MDPCA-1968-8-777
 TFSOA-1968-64-59
 ACPYA-1939-11-453
 DFSOA-1964-37-7 (review)
 PRLAA-1934-146-848
 JPCHA-1967-71-3311
 JACSA-1964-86-4218
 JACSA-1965-87-3801
 PLSSA-1967-15-643
 JACSA-1930-52-2377 (review)
 BØØKA-1938-331 (review)
 BØØKA-1938-433 (review)
 ZPCBA-1932-17-405
 JCPSCA-1970-53-3717
 JCPSCA-1966-44-4137
 IECHA-1956-48-1498 (mechanism)
 PHDTA-1955-Stanford Univ.

$\Theta + \Theta_2 + M \rightarrow \Theta_3 + M$ (Continued)

Vaughan and Noyes

JACSA-1930-52-559 (quantum yield
and mechanism)

Volman, D. H.
 Volman, D. H.
 Warneck, P.
 Warneck, P.
 Warneck and Sullivan
 Wulf, G. R.
 Zablotzkii, T. V.
 Zaslawsky, et al.

JACSA-1951-73-1018
 JACSA-1954-76-6034
 DFS&A-1964-37-57
 JCPSA-1964-41-3435
 BBPCA-1968-72-159 (quantum yield)
 JACSA-1932-54-156 (review)
 JGCHA-1950-20-1449 (mechanism)
 JACSA-1960-82-2682

 $\Theta^* + \Theta_2 + M \rightarrow \Theta_3 + M$

DeMore and Raper
 DeMore and Raper
 Sullivan and Warneck
 Warneck and Sullivan

JCP&A-1962-37-2048 (mechanism)
 CJCHA-1963-41-808
 JCPSA-1967-46-953
 BBPCA-1968-72-159 (quantum yield)

 $\Theta + \Theta_3 \rightarrow \Theta_2 + \Theta_2$

Ackermann, M.
 Axworthy, A. E., Jr.
 Axworthy and Benson
 Barnes, et al.
 Bascombe, K. N.
 Benson, S. W.
 Benson, S. W.
 Benson and Axworthy
 Benson and Axworthy
 Beretta and Schumacher
 Berlad, A. L.
 Bortner, M. H.
 Bortner and Kumller
 Bortner and Kumller
 Campbell and Nudelman
 Castellano and Schumacher
 Castellano and Schumacher
 Clark, et al.
 Clyne, et al.
 Clyne, et al.
 Davidson, N.
 Demetriades, S. T.
 Devins, J. C.
 Eucken and Patat
 Glissmann and Schumacher
 Harteck and Dondes
 Heidt, L. J.
 Intezarova and Kondrat'ev
 Jahn, S.

Johnston, H. S.
 Jones and Davidson
 Jones, et al.
 Kamentskaya and Pshezhetskii
 Kaufman, F.
 Kieffer and Lutz
 Lewis and von Elbe
 Lundell, et al.
 McGrath and Norrish
 McKenney and Laidler
 Matthias and Schiff
 Matthias and Schiff
 Nicolet, M.
 Phillips and Schiff
 Pshezhetskii, et al.
 Pshezhetskii, et al.
 Ritchie, M.

DFS&A-1964-37-209 (review)
 PHDTA-1959-S. Calif. Univ.
 ADCSA-1959-21-388
 BMIRA-1964-RMI-197-10-2 (review)
 *ERDEZ-1965-RPT/E.R.D.E. 1/S/65
 JCPSA-1957-26-1351 (mechanism)
 JCPSA-1960-33-939 (review)
 JCPSA-1957-26-1718
 JCPSA-1965-42-2614
 ZPCBA-1932-17-417
 JCPSA-1967-46-2777
 NBTNA-1969-TN-488 (evaluation)
 DASRA-1967-RPT/1968 (review)
 *GESLZ-1969-RPT/GE-9500-ECS-SR-1 (review)
 XCCIA-1960-AD 242327 (review)
 ZPCFA-1962-34-198
 ZPCFA-1969-65-62
 PRLAA-1970-317-407
 ZFS&A-1965-61-2701
 NATUA-1963-199-1057
 *AVEVZ-1958-RPT/32 (review)
 JASSA-1958-25-653
 JES&A-1956-103-460
 ZPCBA-1936-33-459
 ZPCBA-1933-21-323
 JCPSA-1954-22-758
 JACSA-1935-57-1710
 BACCA-1967-2326
 ZACMA-1906-48-260 (rate and
mechanism)
 NSRDA-1968-NBS 20 (evaluation)
 JACSA-1962-84-2868
 PRLAA-1970-316-431 (mechanism)
 ZFKHA-1958-32-1122
 PRKNA-1961-1-1 (review)
 SYMCA-1967-11-67
 JCPSA-1934-2-537 (calculation)
 SYMCA-1969-12-307
 PRLAA-1957-242-265
 CJCHA-1962-40-539
 DFS&A-1964-37-38
 JCPSA-1964-40-3118
 PAIR-1954-RPT/61
 JCPSA-1962-36-1509
 JPCUA-1959-33-402
 TNFKA-1959-2-27
 PRLAA-1934-146-848

$\Theta + \Theta_3 \rightarrow \Theta_2 + \Theta_2$ (Continued)

Schiff, H. I.
 Schumacher, H. J.
 Sutphen, W. T.
 Volman, D. H.
 Warneck, P.
 Wulf and Tolman
 Zaslawsky, et al.

AGEPA-1964-20-115 (review)
 B6GKA-1938-331 (review)
 B6GKA-1938-433 (review)
 JACSA-1930-52-2377 (review)
 ZPCBA-1932-17-405
 JCPSA-1960-33-938 (review)
 PHDTA-1955-Stanford Univ.
 JACSA-1951-73-1018 (mechanism)
 DFSOA-1964-37-57
 JACSA-1927-49-1650
 JACSA-1960-82-1682

 $\Theta + \Theta_3 \rightarrow \Theta_2^* + \Theta_2$

Baiamonte, et al.
 Fluegge and Headrick
 McGrath and Norrish
 McGrath and Norrish
 McGrath and Norrish
 Wulf, G. R.

JCPSA-1966-44-673
 *CARBZ-1970-RPT/RM-2777-B-1 (review)
 PRLAA-1957-242-265
 PRLAA-1960-254-317
 ZPCFA-1958-115-245 (mechanism)
 JACSA-1932-54-156 (review)

 $\Theta + \Theta_3 \rightarrow \Theta_2^* + \Theta_2^*$

Baretta and Schumacher
 Fluegge and Headrick
 Glissmann and Schumacher
 Kistiakowski, G. B.
 Schumacher, H. J.
 Schumacher, H. J.
 Schumacher, H. J.
 Snelling, et al.

ZPCBA-1932-17-417
 *CARBZ-1970-RPT/RM-2777-B-1 (review)
 ZPCBA-1933-21-323
 ZEPCA-1925-117-337
 JACSA-1930-52-2377 (review)
 ZPCBA-1932-17-405
 B6GKA-1938-433 (review)
 JCPSA-1966-44-4137

 $\Theta + \Theta_3 \rightarrow \Theta_2 + \Theta_2$

Wulf, G. R.

JACSA-1932-54-156 (mechanism)

 $\Theta^* + \Theta_3 \rightarrow \Theta_2 + \Theta_2$

Biedenkapp and Bair
 Bortner and Kummler
 DeMore, W. B.
 Gauthier and Snelling
 Jones, et al.
 Snelling and Bair
 Snelling, et al.
 Sullivan and Warneck
 Warneck and Sullivan
 Warneck and Sullivan

JCPSA-1970-52-6119
 *GESLZ-1969-RPT/GE-9500-ECS-SR-1 (review)
 JPCHA-1969-73-391 (¹D)
 CHPLB-1970-5-93 (¹D)
 PRLAA-1970-316-431 (¹D) (mechanism)
 JCPSA-1967-47-228 (¹D)
 JCPSA-1966-44-4137
 JCPSA-1967-46-953 (¹D)
 BBPCA-1968-72-159 (¹D)
 PLSSA-1966-14-1225 (¹D)

 $\Theta^* + \Theta_3 \rightarrow \Theta_2 + \Theta_2^*$

Baiamonte, et al.
 Benson, S. W.
 Castellano and Schumacher
 Jones and Wayne

JCPSA-1966-44-673
 JCPSA-1957-26-1351 (mechanism)
 ZPCFA-1969-65-62 (¹D)
 PRLAA-1970-319-273 ($\Theta^*({}^1D)$; $\Theta_2^*({}^1\Delta_g$,
 or ${}^1\Sigma_g^+$)) (mechanism)
 JCPSA-1967-47-541 (¹D)

Katakis, D.

$\Theta^* + \Theta_3 \rightarrow \Theta_2 + \Theta_2^*$ (Continued)

McGrath and Norrish	NATUA-1958-182-235 (mechanism)
McGrath and Norrish	PRLAA-1960-254-317 [$\Theta^*(^1D)$] (mechanism)
$\Theta^* + \Theta_3 \rightarrow \Theta_2^* + \Theta_2^*$	
Fitzsimmons and Bair	JCPSCA-1964-40-451 (lower limit estimate)
Katakis, D.	JCPSCA-1967-47-541 (^1D)
Webster and Bair	JCPSCA-1970-53-4532
$\Theta_2^* \rightarrow \Theta_2 + h\nu$	
Keck, et al.	JCPSCA-1958-28-723
Keck, et al.	APNYA-1959-7-1
Nicholls, et al.	CBFMA-1959-3-13 (review)
Nicholls, et al.	ASJGA-1960-131-399
$\Theta_2 + h\nu \rightarrow \Theta + \Theta$	
Nicolet, M.	DFSGA-1964-37-7 (review)
$\Theta_2 + h\nu \rightarrow \Theta + \Theta^*$	
Beyer and Welge	JCPSCA-1969-51-5323 (^1D, or ^3S)
Clerc, et al.	JCPSCA-1969-50-3721 (mechanism)
Ditchburn and Heddle	PRLAA-1953-220-61
Filseth and Welge	JCPSCA-1969-51-839 (mechanism)
Izod and Wayne	CHPLB-1969-4-208 (mechanism)
Nalbandjan, A. B.	ACPYA-1939-11-453 (mechanism)
Young, et al.	JCPSCA-1968-49-4758 (^1D) (quantum yield)
$\Theta_2 + M \rightarrow \Theta + \Theta + M$	
Atallah, S.	*AFCRL-1961-RPT/761 (evaluation)
Bascombe, K. N.	*ERDEZ-1965-RPT/E.R.D.E. 1/S/65
Baulknight, C.	*GQRZZ-1965-RPT/RM-274 (evaluation)
Benson, S. W.	JCPSCA-1957-26-1351 (mechanism)
Benson and Axworthy	JCPSCA-1957-26-1718 (estimate)
Bortner, M. H.	NBTNA-1969-TN-484 (evaluation)
Byron, S. R.	JCPSCA-1959-30-1380
Camac and Feinberg	SYMCA-1967-11-137
Camac and Vaughan	JCPSCA-1961-34-460
Camac, et al.	IAESA-1958-PR802
Campbell and Nudelman	XCCIA-1960-AD 242327
Chesick and Kistiakowsky	JCPSCA-1958-28-956
Duff, R. E.	PFLDA-1958-1-242
Eckerman, J.	XNORA-1961-RPT/6724
Evans, J. S.	NACNA-1956-TN/3860 (calculation)
Generalov and Losev	JQSRA-1966-6-101
Generalov and Losev	ZPMFA-1960-64
Hall, et al.	JASSA-1962-59-1038 (review)
Hirschfelder, et al.	JPCHA-1953-57-403
Johnston, H. S.	NSRDA-1968-NBS 20 (evaluation)
Kaufman, F.	PRKNA-1961-1-1 (review)
Kondratiev and Nikitin	JCPSCA-1966-45-1078
Losev, S. A.	DANKA-1958-120-1291
Losev, S. A.	DANKA-1961-141-894
Losev and Shatalov	SPHDA-1969-14-227
Matthews, D. L.	PFLDA-1959-2-170
Nikitin, E. E.	JPCUA-1959-33-208
Nikitin and Sokolov	JCPSCA-1959-31-1371
Peng and Pindroh	BBSDA-1963-RPT/D2-13422 (review)

$\Theta_2 + M \rightarrow \Theta + \Theta + M$ (Continued)

Pratt, N. H.
 Schexnayder and Evans
 Troe and Wagner
 Tunder, et al.
 Vaughan and Camac
 Watt and Myerson
 Wray, K. L.
 Wray, K. L.
 Wray, K. L.
 Wray, K. L.
 Wray, et al.

NGTRA-1963-Pratt (review)
 NASCA-1961-RPT/108
 BBPCA-1967-71-937 (review)
 *ASTSZ-1967-RPT/TR1001(9210-02)-1
 BAPSA-1959-4-290
 JCPSA-1969-51-1638
 PGARA-1962-7-181 (review)
 JCPSA-1962-37-1254
 JCPSA-1963-38-1518
 SYMCA-1965-10-523
 SYMCA-1962-8-328 (review)

 $\Theta_2^* + M \rightarrow \Theta + \Theta + M$

Dorrance, W. H.
 Gaydon and Hurle
 Glick and Wurster
 Heims, S. P.
 Losev and Generalov

JASSA-1961-28-43 (review)
 SYMCA-1962-8-309
 JCPSA-1957-27-1224
 NACNA-1958-TN4144 (calculation)
 SPHDA-1962-6-1081

 $\Theta_2^* + M \rightarrow \Theta + \Theta^* + M$

Benson, S. W.

JCPSA-1957-26-1351 (mechanism)

 $\Theta_2 + M^* \rightarrow \Theta_2^* + M$ (energy transfer)

Biedenkapp and Bair
 Clark, I. D.
 Fallon, et al.
 Gauthier and Snelling
 Izod and Wayne
 Jones, et al.
 Volman, D. H.

JCPSA-1970-52-6119
 CHPLB-1970-5-317
 JPCHA-1960-64-505 (mechanism)
 CHPLB-1970-5-93
 CHPLB-1969-4-208
 PRLAA-1970-316-431 (mechanism)
 JACSA-1954-76-6034 (mechanism)

 $\Theta_2^* + M \rightarrow \Theta_2 + M$ (rotational relaxation)

Parker, et al.

JASMA-1953-25-263

 $\Theta_2^* + M \rightarrow \Theta_2 + M$ (vibrational relaxation)

Balamonte, et al.
 Benson, et al.
 Bethe and Teller
 Blackman, V.
 Byron, S. R.
 Camac, M.
 Dickens and Ripamonti
 Dorrance, W. H.
 Duff and Davidson
 Fitzsimmons and Bair
 Generalov, N. A.
 Generalov, N. A.
 Generalov, N. A.
 Generalov and Losev
 Generalov and Losev
 Generalov and Losev
 Generalov, et al.
 Getzinger, et al.
 Glick and Wurster
 Heims, S. P.
 Henderson, M. C.
 Henry, P. S. H.
 Holmes, et al.

JCPSA-1966-44-673
 JCPSA-1962-37-1386 (calculation)
 *MUEZR-1941-RPT/X-117-BRL (calculation)
 JFLSA-1956-1-61
 JCPSA-1959-30-1380
 JCPSA-1961-34-448
 TFSOA-1961-57-735 (calculation)
 JASSA-1961-28-43 (review)
 JCPSA-1959-31-1018 (calculation)
 JCPSA-1964-40-451
 VMUFA-1962-17-51
 DKPCA-1963-148-51
 VMUFA-1963-18-3
 BUPSA-1963-27-1079
 SPHDA-1963-8-60
 JQSRA-1966-6-101
 SPHDA-1964-9-405
 SYMCA-1965-10-779 (estimation)
 JCPSA-1957-27-1224
 NACNA-1958-TN-4144 (calculation)
 JASMA-1962-34-349
 NATUA-1932-129-300 (estimation)
 PPSOA-1963-81-311

$\Theta_2^* + M \rightarrow \Theta_2 + M$ (vibrational relaxation) (Continued)

Holmes, et al.	PICAB-1962-4-J31
Holmes, et al.	PPSQA-1964-83-769
Jarmain, et al.	ASJQA-1955-122-55
Kiefer and Lutz	SYMCA-1967-11-67
King and Partington	PHMAA-1930-9-1020
Kneser, H. G.	ANPYA-1933-16-337 (calculation)
Kneser, H. G.	JASMA-1933-5-122 (calculation)
Kneser and Knudsen	ANPYA-1934-21-682
Knoetzel and Knoetzel	ANPYA-1948-2-393
Knudsen, V. G.	JASMA-1933-5-112
Lipscomb, et al.	PRLAA-1956-233-455
Losev and Generalov	SPHDA-1962-6-1081
Lutz and Kiefer	PFLDA-1966-9-1638
Millikan and White	JCPSA-1963-39-3209 (evaluation)
Osipov, A. I.	FPSPA-1960-1-188 (calculation)
Osipov, A. I.	FPSPA-1962-1-188
Osipov, A. I.	SPHDA-1962-6-603
Osipov, A. I.	KICAA-1963-4-427 (calculation)
Parker, J. G.	JCPSA-1961-34-1763
Parker, J. G.	JCPSA-1964-41-1600
Parker and Swope	JASMA-1965-37-718
Parker and Swope	JCPSA-1965-43-4427
Penny and Aroeste	JCPSA-1955-23-1281 (calculation)
Salkoff and Bauer	JCPSA-1959-30-1614 (calculation)
Schwartz and Herzfeld	JCPSA-1954-22-767 (calculation)
Schwartz, et al.	JCPSA-1952-20-1591 (calculation)
Shields and Lee	JASMA-1963-35-251
Shilling and Partington	PHMAA-1928-6-920
Snelling, et al.	JCPSA-1966-44-4137 (mechanism)
Strehlow and Cohen	JCPSA-1959-30-257
Treanor and Wurster	JCPSA-1960-32-758
Van Itterbeek and Mariëns	PHYSA-1940-7-125
Volman, D. H.	JCPSA-1956-23-122 (mechanism)
Watt and Myerson	JCPSA-1969-51-1638
White, D. R.	JCPSA-1965-42-447
White, D. R.	JCPSA-1965-42-2028
White and Millikan	JCPSA-1963-39-1803
White and Millikan	JCPSA-1963-39-1807
White and Millikan	JCPSA-1963-39-2107
White and Millikan	AIAJA-1964-2-1844
Zipf, E. C.	CJCHA-1969-47-1863 (review)

 $\Theta_2^* + M \rightarrow \Theta_2 + M^*$ (energy transfer)

Volman, D. H.

JACSA-1954-76-6034 (rel. rates)

 $\Theta_2 + \Theta_2 \rightarrow \Theta + \Theta_3$

Bascombe, K. N.
 Benson and Axworthy
 Bortner, M. H.
 Campbell and Nudelman
 Davidson, N.
 Duff, R. E.
 Johnston, H. S.
 Tunder, et al.

*ERDEZ-1965-RPT/E.R.D.E. 1/S/65
 JCPSA-1957-26-1718
 NBTNA-1969-TN-484 (evaluation)
 XCCIA-1960-AD 242327 (review)
 *AVEVZ-1958-RPT/32 (review)
 PFLDA-1958-1-242
 NSRDA-1968-NBS 20 (evaluation)
 *ASTSZ-1967-RPT/TR1001(9210-02)-1

 $\Theta_2 + \Theta_2^* \rightarrow \Theta + \Theta_3$ Fallon, et al.
Vaughan and Noyes

JPCHA-1960-64-505 (mechanism)
 JACSA-1930-52-559 (quantum yield
and mechanism)
 JACSA-1954-76-6034 (quantum yield)

Volman, D. H.



Klein and Herron
Klein and Herron

JCPSCA-1964-41-1285
JCPSCA-1966-44-3645



Cadle, R. D.



Benson, S. W.
Benson, S. W.
Beretta and Schumacher
Castellano and Schumacher
Kistiakowsky, G.
McGrath and Norrish
McGrath and Norrish
Nicolet, M.
Norrish and Wayne

Schumacher, H. J.
Schumacher, H. J.
Schumacher, H. J.
Warburg, E.
Wayne and White

JCPSCA-1957-26-1351 (mechanism)
JCPSCA-1960-33-939 (review)
ZPCBA-1932-17-417 (mechanism)
ZPCFA-1962-34-198 (quantum yield)
ZEPCA-1925-117-337
PRLAA-1957-242-265 (mechanism)
ZPCFA-1958-15-245 (mechanism)
DFSCA-1964-37-7 (review)
PRLAA-1965-288-200 (quantum yield
and mechanism)
JACSA-1930-52-2377
JCPSCA-1960-33-938 (review)
ZPCBA-1932-17-405 (mechanism)
SPWPA-1913-644 (mechanism)
BPPCA-1968-72-131 (quantum yield
and mechanism)



Jones and Wayne
Jones and Wayne

JCPSCA-1969-51-3617 (quantum yield)
PRLAA-1970-319-273 [$\Theta_2^*(^1\Delta_g$, or $^1\Sigma_g^+$]
(quantum yield and mechani



DeMore, W. B.
DeMore and Raper
DeMore and Raper
DeMore and Raper
Raper and DeMore
Snelling and Bair
Snelling, et al.
Yamazaki, H.

JPCPA-1969-73-391 (quantum yield)
JCPSCA-1962-37-2048 (quantum yield)
CJCHA-1963-41-808 (quantum yield)
JCPSCA-1966-44-1780 (quantum yield)
JCPSCA-1964-40-1053 (quantum yield)
JCPSCA-1967-47-228
JCPSCA-1966-44-4137
CJCHA-1970-48-3269 (quantum yield)



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Benson, S. W.
Biedenkapp and Bair
Castellano and Schumacher
Fitzsimmons and Bair
Gauthier and Snelling
Jones and Wayne
Jones and Wayne

JCPSCA-1966-44-673
JCPSCA-1957-26-1351 (mechanism)
JCPSCA-1970-52-6119 (quantum yield)
ZPCFA-1969-65-62 (mechanism)
JCPSCA-1964-40-451 (mechanism)
CHPLB-1970-5-93
JCPSCA-1969-51-3617 (quantum yield)
PRLAA-1970-319-273 [$\Theta^*(^1D)$; $\Theta_2^*(^1\Delta_g$, or $^1\Sigma_g^+$]
(quantum yield and mechani
PRLAA-1970-316-431 [$\Theta^*(^1D)$] (quantum yield
and mechanis
NATUA-1958-182+235 (mechanism)
PRLAA-1957-242-265 (mechanism)
PRLAA-1960-254-317 [$\Theta^*(^1D)$; $\Theta_2^*(^1\Delta_g)$]
(mechanism)

Jones, et al.

McGrath and Norrish
McGrath and Norrish
McGrath and Norrish



Wayne and White	BBPCA-1968-72-131 (quantum yield and mechanism)
Webster and Bair	JCPSCA-1970-53-4532 (quantum yield)
$\theta_3 + h\nu \rightarrow 3/2\theta_2$ (overall)	
von Bahr, E.	ANPYA-1910-33-598
Castellano and Schumacher	ZPCFA-1969-65-62 (quantum yield and mechanism)
Griffith and McKeown	ZEPCA-1926-120-236 (review)
Griffith and MacWillie	JCSQA-1923-123-2767 (rate and mechanism)
Griffith and Shutt	JCSQA-1923-123-2752
Heidt, L. J.	JACSA-1935-57-1710 (quantum yield)
Heidt and Forbes	JACSA-1934-56-2365 (quantum yield)
Preston and Cvetanovic	*CCKNZ-1971-4-Preprint (review and mechanism)
Regner, E.	ANPYA-1906-20-1033
Riesenfeld and Wassmuth	ZPCBA-1930-8-314 (quantum yield and mechanism)
Schumacher and Sprenger	ZPCBA-1930-11-38 (review)
Weigert, F.	ZEELA-1913-18-654
$\theta_3 + M \rightarrow \theta + \theta_2 + M$	
Axworthy, A. E., Jr.	PHDTA-1959-S. Calif. Univ.
Axworthy and Benson	ADCSCA-1959-21-388
Bascombe, K. N.	*ERDEZ-1965-RPT/E.A.D.E. 1/S/65
Benson and Axworthy	JCPSCA-1957-26-1718
Benson and Axworthy	JCPSCA-1965-42-2614
Beretta and Schumacher	ZPCBA-1932-17-417
Berlad, A. L.	JCPSCA-1967-46-2777
Bortner, M. H.	NBTNA-1969-TN-484 (evaluation)
Campbell and Nudelman	XCCIA-1960-AD 242327 (review)
Davidson, N.	*AVEVZ-1968-RPT/32 (review)
Demetriades, S. T.	JASSA-1958-25-653
Duff, R. E.	PFLDA-1958-1-242
Garvin, D.	JACSA-1954-76-1523
Gill and Laidler	TFSQA-1959-55-753
Glissmann and Schumacher	ZPCBA-1933-21-323
Harteck and Dondes	JCPSCA-1953-21-2240
Harteck and Dondes	JCPSCA-1953-21-2241
Heidt, L. J.	JACSA-1935-57-1710
Jahn, S.	ZACMA-1906-48-260 (mechanism)
Johnston, H. S.	NSRDA-1968-NBS 20 (evaluation)
Jones and Davidson	JACSA-1962-84-2868
Kaufman, F.	PRKNA-1961-1-1 (review)
Kaufman, F.	PRLAA-1958-247-123
Kiefer and Lutz	SYMCA-1967-11-67
Klein and Herron	JCPSCA-1964-41-1285
Mathias and Schiff	JCPSCA-1964-40-3118
Nikitin, E. E.	JPCUA-1959-33-208
Nikitin and Sokolov	JCPSCA-1959-31-1371
Pshezhetskii, et al.	JPCUA-1959-33-402
Ritchie, M.	PRLAA-1934-146-848
Schumacher, H. J.	B66KA-1938-433 (review)
Schumacher, H. J.	ZPCBA-1932-17-405
Sutphen, W. T.	PHDTA-1955-Stanford Univ.
Troe and Wagner	BBPCA-1967-71-937 (review)
Tunder, et al.	*ASTSZ-1967-RPT/TR1001-(9210-02)-1
Volman, D. H.	JACSA-1951-73-1018
Wieder and Marcus	JCPSCA-1962-37-1835
Wulf, G. R.	JACSA-1932-54-156 (review)
Wulf and Tolman	JACSA-1927-49-1183
Wulf and Tolman	JACSA-1927-49-1202
Wulf and Tolman	JACSA-1927-49-1650 (mechanism)

$\Theta_3 + M \rightarrow \Theta + \Theta_2 + M$ (Continued)Zabolotskii, T. V.
Zaslawsky, et al.KHNP-1956-1-680
JACSA-1960-82-2682 $\Theta_3 + M^* \rightarrow \Theta + \Theta_2 + M$

Beretta and Schumacher

ZPCBA-1932-17-417

Biedenkapp and Bair

JCPSA-1970-52-6119 [$M^* = \Theta_2(^1\Sigma_g)$]

Bortner and Kummel

*GESLZ-1969-RPT/GE-9500-ECS-SR-1 (review)

Castellano and Schumacher

ZPCFA-1969-65-62 (mechanism)

Clark and Wayne

CHPLB-1963-3-93

Clark, et al.

PRLAA-1970-317-407 [$M^* = \Theta_2(^1\Delta_g)$]

Clyne, et al.

NATUA-1963-199-1057 (mechanism)

Donovan, et al.

CHPLB-1970-7-453 [$M^* = \Theta_2(^1\Delta_g)$]

Fluegge and Headrick

*CARBZ-1970-RPT/RM-2777-P-1 (review)

Glissman and Schumacher

ZPCBA-1933-21-323

Izod and Wayne

PRLAA-1968-308-81 [$M^* = \Theta_2(^1\Sigma_g^+)$]

Jones, et al.

PRLAA-1970-316-431 (mechanism)

Jones and Wayne

PRLAA-1970-319-273 ($M^* = \Theta_2(^1\Delta_g)$, or $^1\Sigma_g^+$
(mechanism))

McNeal and Cook

JCPSA-1967-47-5385 [$M^* = \Theta_2(^1\Delta_g)$]

March, et al.

PHCBA-1965-4-971 [$M^* = \Theta_2(^1\Sigma_g^+)$]

Mathias and Schiff

DFSGA-1964-37-38

McGrath and Norrish

ZPCFA-1958-15-245 (mechanism)

Morgan, et al.

DFSGA-1962-33-118

Phillips and Schiff

JCP-1962-36-3283

Phillips and Schiff

JCP-1962-37-924 (upper limit
estimate)

Schumacher, H. J.

ZPCBA-1932-17-405

Schumacher, H. J.

B66KA-1938-433 (review)

Snelling, et al.

JCP-1966-44-4137 (mechanism)

Wayne and Pitts

JCP-1969-50-3644 [$M^* = \Theta_2(^1\Delta_g)$]

Webster and Bair

JCP-1970-53-4532

 $\Theta_3 + M^* \rightarrow \Theta^* + \Theta_2 + M$

Jones and Wayne

PRLAA-1970-319-273 [$\Theta^*(^1D)$; $M^* = \Theta_2^*$
($^1\Delta_g$, or $^1\Sigma_g^+$)]

Katakis, D.

JCPSA-1967-47-541 [$\Theta^*(^1D)$]

McGrath and Norrish

PRLAA-1960-254-317 [$\Theta^*(^1D)$; $\Theta_2^*(^1\Delta_g)$
(mechanism)]

Phillips and Schiff

JCPSA-1962-37-924 [$\Theta^*(^1D)$
(mechanism)] $\Theta_3^* + M \rightarrow \Theta + \Theta_2 + M$

Volman, D. H.

JACSA-1951-73-1018 (mechanism)

 $\Theta_3^* + M^* \rightarrow \Theta + \Theta_2 + M$

Baiamonte, et al.

JCPSA-1966-44-673

$\theta_3 \rightarrow M \rightarrow 3/2\theta_2 \rightarrow M$ (overall)

Belton, et al.	JCSOA-1926-128-3153
Campbell and Nudelman	XCCIA-1960-AD 242327
Chapman and Jones	JCSOA-1910-97-2463
Clarke and Chapman	JCSOA-1908-93-1638
Clement, J. K.	ANPYA-1904-14-334
Glissmann and Schumacher	ZPCBA-1933-21-323
Griffith and McKeown	JCSOA-1925-127-2086 (rate and mechanism)
Griffith and McKeown	ZEPCA-1926-120-236 (review)
Griffith and McKeown	JACSA-1927-49-2721 (review)
Hibben, J. H.	JACSA-1928-50-937
Jahn, S.	ZACMA-1906-48-260
Johnston, H. S.	B60KA-1966-14 (review)
Johnston, H. S.	B60KA-1966-299 (review)
Kamentskaya and Pshezhetskii	ZFKHA-1958-32-1122
Kassel, L. S.	ACM6A-1932-57-264 (review)
Lewis, B.	JPCHA-1933-37-533
Moelwyn-Hughes, E. A.	B60KA-1957-112 (review)
Perman and Greaves	PRSLA-1908-80-353
Preston and Cvetanovic	*CCKNZ-1971-4-Preprint (review and mechanism)
Pshezhetskii, et al.	JPCUA-1959-33-402
Riesenfeld and Bohnoltzer	ZEPCA-1927-130-241
Riesenfeld and Schumacher	ZEPCA-1928-138-268
Riesenfeld and Wassmuth	ZEPCA-1929-143-397 (rate and mechanism)
Riesenfeld and Wassmuth	ZPCBA-1930-8-314 (mechanism)
Schumacher, H. J.	B60KA-1938-433 (review)
Schumacher and Sprenger	ZPCBA-1929-6-446
Schumacher and Sprenger	ZPCBA-1930-11-38 (review)
Sprenger, G.	ZEELA-1931-37-674 (N_2O_5 catalysts)
Sutphen, W. T.	PHDTA-1955-Stanford Univ.
Trautz, M.	ZAACA-1916-96-1 (review)
Warburg, E.	SPWPA-1901-1126
Weigert, F.	ZEPCA-1912-80-78
Weigert and Bohm	ZEPCA-1915-90-189
Wulf, O. R.	JACSA-1932-54-156 (review)
Wulf and Tolman	JACSA-1927-49-1650
Zaslawsky, et al.	JACSA-1960-82-3682
$\theta_3 \rightarrow M \rightarrow 3/2\theta_2^* \rightarrow M$	ZPCBA-1933-21-323
Glissman and Schumacher	B60KA-1938-433 (review)
$\theta_3^* \rightarrow M \rightarrow \theta_3 \rightarrow M$	
Cadle, R. D.	DF6SA-1964-37-66 (estimation)
Hochanadel, et al.	JCPSA-1968-48-2416
Klein and Herron	JCPSA-1964-41-1285
Klein and Herron	JCPSA-1966-44-3645
Volman, D. H.	JACSA-1951-73-1018 (mechanism)

II(b). REVIEWS

- | | |
|------------------------|---|
| Axworthy, A. E., Jr. | PHDTA-1959-S. Calif. Univ. |
| Barth, C. A. | AGEPA-1964-20-182 |
| Baulknight, C. | *GQRZZ-1965-RPT/RM-274 (evaluation) |
| Bortner and Kummeler | *GESLZ-1969-RPT/GE-9500-ECS-SR-1 |
| Bortner, M. H. | NBTNA-1969-TN-484 (evaluation) |
| Bortner and Kummeler | DASRA-1967-RPT/1948
(Ch. 19: evaluation) |
| Carrington and Garvin | *CCKNZ-1969-3-107 (mechanism) |
| Davidson, N. | *AVEVZ-1958-RPT/32 |
| Ford, H. | CJCHA-1960-38-1780 (mechanism) |
| Ford, H. W. | SYMCA-1962-8-119 (mechanism) |
| Heicklen, J. | AIAJA-1967-5-4 |
| Johnston, H. S. | NSRDA-1968-NBS 20 (evaluation) |
| Kassel, L. S. | ACM&A-1932-57-264 |
| Kaufman, F. | PRKNA-1961-1-1 |
| Lin and Fyfe | PFLDA-1961-4-238 |
| McGrath and McGarvey | PLSSA-1967-15-427 (Θ^* deactivation) |
| Pratt, N. H. | NGTRA-1963-Pratt |
| Preston and Cvetanovic | *CCKNZ-1971-4-Preprint |
| Schumacher, H. J. | B Θ KA-1938-331 |
| Schumacher, H. J. | B Θ KA-1938-433 |
| Wayne, R. P. | ADPCA-1969-7-311 [$\Theta_2^*(a^1\Delta_g)$ and
$\Theta_2^*(b^1\Sigma_g^+)$] |
| Zipf, E. C. | CJCHA-1969-47-1863 (Θ^* and Θ_2^*)
(deactivation) |

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 $14-14N_2 + 15-15N_2 \rightarrow 2^{14-15}N_2$. Single-Pulse Shock-Tube Studies," J. Chem. Phys. 47, 2878 (1967)
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 - "2. Messungen des Gleichgewichts $N_2O_4 \rightarrow 2 NO_2$." (Boës, F., co-worker) Ibid., 100, 75 (1922);
 - "3. Messungen des Gleichgewichts $2 NO_2 \rightarrow 2 NO + O_2$." (Lindner, co-worker) Ibid., 100, 82 (1922);
 - "4. Messungen der Geschwindigkeit $2 NO + O_2 \rightarrow 2 NO_2$." (Lindner, co-worker) Ibid., 100, 87 (1922);
 - "5. Messungen der Geschwindigkeit $2 NO_2 \rightarrow 2 NO + O_2$." (Ramstetter, co-worker) Ibid., 100, 106 (1922)
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